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A Quarterly Journal of Fact and Opinion

Columbia University

FORUM

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A History of Yesterday	<i>Leo Tolstoy</i>
Ruth Benedict: The Woman	<i>Richard Chase</i>
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A Quarterly Journal of Fact and Opinion

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LETTERS

Mr. Beckett replies

● I like Mr. Barrett's essay very much, it goes to the heart of the matter. ["How I Understand Less and Less Every Year"; Winter 1959] Please convey to him my gratitude. It is a good day for a writer when such sympathy and understanding come his way.

SAMUEL BECKETT
Paris, France

Religious revival: pro

● I was most interested in "Religion in America: What Religious Revival?" by Seymour Martin Lipset. As a sociologist he writes well, intelligently, and always with sufficient statistics to document his case convincingly. I must ask him, however, just what he was attempting to prove?

A religious revival implies religion and religion implies God. This simple statement would not be denied by even a sociologist. Furthermore, God is, at the very least, a concept of some sort (and this, too, I think will be granted). Concepts are of that world which exists . . . in the mind and only through the mind . . . We might term it the subjective world but its [contents] have certainly plagued our objective world for centuries. The English historian Lord Bryce remarked that more blood has been shed in the name of religion than for any other human pursuit. The struggles of religion within itself and with the secular state are indelibly written into our past and present. The concept of God thus becomes a reality similar to the political reality that defines our very existence . . . If religion may be reduced to a concept of God, we must realize that, excepting the serious student of theology, institutionalized religion considers only the word . . . God considered as a concept is not subject to the neat divisions of our traditional religious institutions; religion involves God, not the organization.

Sociologists have been bold and vociferous of late in pointing out the truth of developmental patterns, both in the culture and the individual. Institutions are known to be slow in their response to cultural developments, which I believe follow after individual development in a small and rather circumscribed group of people usually lumped together as "the intellectuals." College graduates are certainly of that general group but I mean here a more highly selective group of creative, individual and thinking men.

In brief, I do not think the concept of God is the same today as it was when the institutions began, although the latter might not imagine the change. This is precisely where I question Dr. Lipset. He writes of the institution but not of the idea that is the continuum of the human response he wishes to examine. This may be good sociology but it is poor logic. Properly . . . such an examination as Dr. Lipset has undertaken [should inquire] into the modern concepts of God and then attempt to discover trends.

As a quasi-scientist and a quasi-humanist I may be able to speak with the authority of very limited experience in both of these traditions. The scientist, while well aware of the limitations of his methods and techniques, is very apt to be teleologically led to a rationalist God by discoveries of uniformities and order in the universe which are reducible to laws, despite overwhelming complexity. If you argue that such order is only in our minds, that this is our way of grasping what we observe and not really what the universe is, this is also all that we mean by a concept of God. Many have remarked with Albert Einstein that the only truly religious man in the twentieth century is the dedicated research scientist. As for the humanist, his acceptance of the limitations of human knowledge leads him to the position of paradox, or what Camus calls the absurd, [in which he attempts] to give meaning to life in the face of inevitable death. If this question is examined in terms of a commitment either to continued life or suicide, on the basis of a philosophical choice, the former choice amounts to an

affirmation of the God concept.

A religious revival in [conceptual] terms would be something quite different than the one Dr. Lipset speaks of, and [might be found to be] surprising in its extent.

GERALD T. KEUSCH
1958, Columbia College
Boston, Massachusetts

● The status of religion in American life in the 1950's is markedly different from what it was in the '20's and '30's. This assertion is beyond question in the case of Judaism, the religion I know best. The last fifteen years have witnessed phenomenal growth in the number of synagogues (many of them made up entirely of young married people), in the number of congregational members, in the number of children and young people receiving religious instruction, and in the number of men entering the rabbinical profession. Figures are readily available, and even if some allowance must be made for exaggeration, they are convincing.

Perhaps this development has not been entirely typical of what is going on in America today, but it is certainly not unique. Religion has clearly become more respectable than formerly among the intellectuals, as shown, for example, by the current prestige of men like Reinhold Niebuhr and Paul Tillich. Books on religion—addressed to low-, high-, and middle-brows—have had a great success. Determined efforts are being made, by a variety of methods, to develop a kind of education in which religious ideas shall be integrated with the entire subject matter of the curriculum.

The facts I have cited are just examples and more could be added. To interpret these facts would be too long and complicated a task. I must admit frankly, from my own standpoint as a religious teacher, that not all the changes are agreeable and some of them are disturbing. But, for good or bad, something has happened. Its importance may be overrated, but it is not just a publicist's dream.

RABBI BERNARD J. BAMBERGER
Congregation Shaaray Tefila
New York, N.Y.

LETTERS (Cont.)

More letters on Spain

• Arnold Beichman's article ["Letter from Spain: Conversations with 'Conspirators,'" Winter 1959] pointed out the contradictions in the thinking of the Spanish opposition, and that was the point to be made. The Spanish intelligentsia that opposes Franco seems not to possess the necessary realism, . . . not to have made the necessary pragmatic preparation for the inevitable change, though I myself have observed an immense enthusiasm there for change. How and which way and what after Franco—these are the considerations that divide and confuse the majority of the Spanish "conspirators."

Ridrujo has the heart and the spark of an authentic revolutionary, and he is probably going to lead the revolution. Enrique Tierno Galvan, professor at the University of Salamanca, could supply the reason and the brains. Pedro Lain will eventually lead. The United States should keep in touch with these people, for in a change we could easily end up isolated from the Spanish people—who are, already, against us.

BOGDAN RADITSA
New York, N. Y.

Mr. Raditsa, a noted scholar and political commentator, published his own observations on Spain in more detail in the March 9 NEW LEADER.

—EDITOR

• . . . one of the most comprehensive, clear-sighted and objective pictures I have seen of this Castilian combination of hope and decay, struggle and stagnation, blood and gold.

Mr. Beichman stresses the immense difference in degree—so immense that it turns into a difference in nature—between Francoist and Communist dictatorships. Like him and [every other outside observer in Spain] I have heard people in the cafes, taxi-drivers, maids, clerks of all sorts talking in loud voices against the Franco regime. All this, together with the new details reported by Mr. Beichman about semi-open inner opposition there, [would be] inconceiv-

able dreams to the inner opposition in the USSR . . .

Franco belongs to what could be called the soft era of dictatorships, to those old times when exiling a dissenter to a distant spot (where he was allowed to hunt, read and write) was considered the utmost outrage to freedom, and sufficed (rightly!) to inflame the indignation of liberals. Since then, a hundred times worse persecution of dissenters has been devised by our century's truly "totalitarian" dictators. Indeed, it becomes urgent that we recognize frankly two different historical phenomena and use different words to indicate them. If old habits make us [refer to the] "dictatorship" of Napoleon III, the Tsars, the pre-Hitlerian Mussolini, and Franco, then we should use "terrorism" or "totalitarian tyranny" to designate Nazism and Communism.

Mr. Beichman suggests this . . . But then, when he raises the "moral" problem of whether democratic nations can ally with undemocratic regimes like Franco's, [one may be tempted to reason thus:] if ever *realism* can excuse some twists in the "pure" line of a democrat, it is certainly in those cases where the resources of a relatively moderate dictatorship, with no international ties and of aggressive strength, can be used against a world-wide, organized tyranny possessing nuclear weapons. This playing of a lesser evil against a much greater one provided the . . . justification for our war-time alliance with Stalin against Hitler.

Such reasoning is wrong twice. First, because Stalin did *not* represent the "smaller evil" and the softer despotism compared to Hitler. Second, because when the democracies allied with Stalin, they did so with *no scruples at all*, no remorse, no wrestling with a "moral problem" by democrats, excepting a tiny handful. Every day those same pure democrats who feel shocked by any alliance with Franco are actually [urging] that we pet Khrushchev—rebuke the cat and welcome the tiger. If it is proper, in the name of *realism*, to make smiling agreements with one of the principal butchers of Budapest, of Katyn, of the Baltic peoples, why should not realism allow a cold exchange of services with the "butcher of Badajoz"?

Mr. Beichman . . . also shows that in Spain economic help has failed in its political intentions. We stumble once again, in Spain, on the problem of how to make a success of aid to underdeveloped countries in general. If the trouble is that by pouring funds into the *government offices* of authoritarian countries only a small fraction issues for the benefit of the people—and therefore for the [anti-authoritarian] cause—then why not try to make gifts *directly to the people*? By which I do not mean, of course, throwing coppers to the crowds, but giving finished, useful works. Could not a scheme be devised by which the United States—or whatever Western agency—would construct dams, railroads or factories, according to agreed-upon plans, but using local manpower entirely under the management of the donor, and deliver them, when finished, to the benefiting nation?

By such a scheme, we could perhaps avoid wasting money, avoid inefficiency, and the important drawback that our aid often fails to reach the people. Dollars running only through bureaucratic channels are not perceived by the masses, whereas when a finished dam is delivered, everyone can see and realize the gift. Finally, the scheme could also cure our remorses (which I feel too) for helping undemocratic regimes. When assistance is embodied in works fastened to the earth, it is apparent that they are intended, and operating, for the people—not for the regime.

SUZANNE LABIN
Paris, France

Mme. Labin, the distinguished French journalist and historian, traveled in Spain last summer. She holds the Prix de la Liberté, writes often in European journals. On page 6 a Spaniard writes from Spain and Mr. Beichman replies.

—EDITOR

Correction

• Einstein's Relativity is always intriguing, frequently puzzling, and sometimes subject to confusion—even in the FORUM's Chronicle [Winter 1959]. May I try to state more precisely what was demonstrated by the recent experiments with masers in the Watson Research Laboratory at Columbia? They were de-

signed to test the basic thesis of relativity that there is no absolute frame of reference—"no hitching post"—in our universe. Consider the earth as a boat gliding without waves through a flat and endless ocean, the classical ether. The captain could know that he was moving with respect to this frame of reference, the ocean, by agitating water on one side and seeing whether the resulting waves move straight out from the boat or drift astern as the boat advances. The maser experiment examined whether or not the earth's motion produced an effect on the direction (not the speed) of radio waves emitted by agitating ammonia molecules within the maser. Time and frequency enter the experiment because frequencies of radio waves vary according to relative motion even in Einstein's world. Thus, the maser's high precision atomic timing was able to check whether or not the waves were moving astern of our earth boat, and gave a rather exacting test for any tenuous remnant of the ether, a medium most physicists have now for some time discarded. No trace was found of the ether or any other reference with respect to which an absolute velocity can be detected.

CHARLES H. TOWNES
Professor of Physics

Dr. Townes, inventor of the maser and an advisor to the FORUM, was recently awarded the Comstock Prize by the National Academy of Science for his invention. —EDITOR

Contra Mrs. Crist

• . . . I am irritated by Judith Crist's article ["Gentlemen and Scholars of the Press," Winter 1959] because:

1. She glosses over or entirely ignores the fact that the Newspaper Guild deliberately and intentionally foreswore any ambition to become a society of "professional" people; bourgeois we may be, but professionals we ain't, up to right now. As one who hiked a picket line no longer ago than last summer, I must say I have witnessed few doctors, lawyers or clergymen engaged in this pastime.

2. She minimizes the loss from honest newspaper work of good

newspapermen to "the rich or glamorous seduction of television and publicity jobs"; in my view this is no minimal thing but a very serious weakening of our forces.

3. She states as if it were fact "that there are at least a score of highly qualified applicants" for "every reporter's" job. She should get on the hiring side of the desk sometime to try to verify that one!

4. She flatly denies that Hecht's description—"we were a somewhat pathetic crew of paupers and ignoramus"—could be said of "the newspaperman" today. If she could view the newsrooms of America (perhaps excepting those of New York) without those rose-tinted specs, I think she would find less to be complacent about.

In short, she seems to think "we've got it made," and I respectfully submit that we haven't. Oh, I'm sticking with it, too . . . but not because it's so full of "fun." Just that *somebody's* got to mind the store, especially one that perennially sinks so close to bankruptcy. Whether this kind of brinkmanship is the fault of the Guild, the publishers, the Canadian paper barons, or, as they said of the late lamented *Brooklyn Eagle*, "the times we live in," Miss Crist certainly puts her thumb on it when she admits that "each year the number of newspapers decreases." How this can jibe with better times and better prospects for all concerned is utterly beyond me.

Hildy Johnson may "never have had it so good," but . . . how "good" can we have it and still stay afloat?

HERB HARRIGAN
1947 M.A., Journalism
Philadelphia Inquirer
Lecturer, University of Pennsylvania

• The changes which are taking place in the newspaper business, as in industry, are harbingers of the social senescence which follows an advanced maturity. Perhaps, if we can keep the press young and fresh, it may help redeem us from . . . advancing institutional rigidity, selfish economic entrenchment, and *de facto* socialization.

STANLEY HARWICH
1946, Columbia College
Brooklyn, N. Y.

Impractical poetry

• Having lived a good portion of my life outside the University, I find that poetry is impractical goods, and that the need for such impractical goods is stronger than it has ever been. With this last point Mr. Unterecker ["Poetry for the Perfectly Practical Man"; Winter 1959] may readily agree. He writes: "The housewife interested in finding out what T. S. Eliot is doing might very well want to secrete his *Collected Poems* among her cookbooks, or, if she eats breakfast after the rest of the family is out of the way or before they arrive, put it perhaps among the cold cereals . . . Or the busy executive could take two bottles out of the portable "book bar," substitute Yeats' *Collected Poems*, and, without arising, be able inconspicuously to go to Innisfree."

This is meat for S. J. Perelman, not me. My own opinion is that any housewife, after being away from the University ten years, isn't going to give a damn about what T. S. Eliot is doing that early in the morning. As for the busy executive, when he goes to the bar for a bottle after a nerve-sapping, body-numbing day, he will invariably want—a bottle; with it, he will sprawl in a somnambulant trance before the television set; with luck, it will be all he can do to be able inconspicuously to go to the bathroom.

Where then, is the audience for poetry? Is it [around]? Today it is doubtful whether, with the help of a book club and an interview on TV [even] Byron could wake up in the morning and find himself famous. Modern readers may have more leisure, but they are also under more pressure. Yeats' poetry—poetry very much in contact with its time—vibrates with this tension and pressure; but placed among the cold cereals it is not practical goods.

It seems to me that poetry always manages to survive because of the perfectly impractical man, who accepts its uselessness in this working-day world . . . He is never quite satisfied with everyday reality, as indeed art never is. . . .

JERRY B. WEINGART
M.A. 1948, Graduate Faculties
Cleveland, Ohio

An exchange of letters

The following vigorous comments on Mr. Arnold Beichman's "Letter from Spain: Conversations with 'Conspirators'" [FORUM; Winter 1959] were received from Señor Antonio Arboiz, an industrial engineer and citizen of Barcelona. Mr. Beichman's rejoinder follows Señor Arboiz's letter. Other readers' responses to the same article appear in this issue's "Letters" section.

—EDITOR

● Mr. Beichman has, according to his own statements, moved around Spain and talked with a great number of people, including many actively opposed to Franco who nevertheless had no objection to being quoted. And as a result . . . he presents what he pretends to be a true picture of Spain today. The only trouble is that he is neither objective nor truthful, and his picture has as much in common with Spain as an astronomer's picture of life on Venus or Mars has with whatever the reality there is.

To begin with, Mr. Beichman, although speaking in passing of "Franco's supporters" did not apparently meet any. If what he has written is right, then the *Caudillo* is indeed the master juggler of all time, holding on to power against the wish of all Spaniards. And doing this, mind you, with a very inefficient dictatorship, without recourse to terror (as Mr. Beichman admits), in a poor and backward country where nothing has been done well since God knows when, after gaining power against the wish of everybody in a terrible war which came about for no reason at all, meanwhile running the economy in such a way that it is no longer viable and is getting steadily worse.

The truth, although not as pretty or wholly comforting as every Spaniard would like it to be (is there ever complete agreement about the state of the nation in any country?) is far different . . . An example: the author mentions seeing a great number of American, British and German cars in the streets of Madrid, bearing

Spanish license plates; finding that licenses for importing foreign cars (waiting lists for domestic cars: three years) have been suspended since mid-1957, he immediately puts down as the reason for this anomaly that "somehow, one could always find an 'agent' to get a car across the border," forgetting that to get Spanish license plates for a foreign-made car you first have to prove customs clearance, then pass inspection by the Ministry of Public Works to prove that the car is roadworthy and that it checks with the papers you present. The truth is simply that all accredited foreign representatives, diplomatic and consular, in Spain are entitled to an import license every two years for an automobile to be paid for with their own funds, and these cars may be sold by their owners, after two years, to anyone. Further, all Americans stationed in Spain (several thousand) are also entitled to bring in a new car every two years, to be paid for by themselves, but with the difference that they can only sell their cars to the Spanish Government or else take them out of the country again. In this example we can see Mr. Beichman at work, putting down the facts he likes, ignoring altogether those he finds disagreeable, and inventing a "reason" that checks with his pre-conceived ideas . . .

Mr. Beichman also says that "only ten per cent of arable land is irrigated" (what is the comparable US figure?), but he does not mention that irrigated acreage doubled between 1945 and 1951 and has doubled again between 1951 and last year, and is still increasing at an even faster rate (helped by earth-moving machinery used in building US bases and not needed any more there). He speaks of "chronic power shortages" (none this last season, very mild the last few years) but he prudently refrains from noting that total K.W.H. last year was four times what it was before the Civil War, a rate of growth which compares most favorably with any in the world . . . Nor do private power companies build dams and power stations in rivers which "often run dry."

Of course it can be argued where the proper balance between industrialization and agriculture is, and whether the best possible use has been made of Spanish resources and US aid—although it must be kept in mind when speaking

(continued on page 55)

CHARLES DARWIN:

Science and the Saintly Sentiments

**"We must dismiss that cold nonsense
about objectivity" in science, says the author,
to understand this revolutionary, this "intimate
lover" of the natural world, this scientist.**

by ROBERT E. FITCH

"I worked on true Baconian principles, and without any theory collected facts on a wholesale scale." Whoever wrote this, we say, was no scientist. Or if he was a scientist, he was singularly innocent of the workings of his own mind. For we know, don't we, what the scientific mind is like?

The writer was Charles Darwin. He was trying to explain how he had begun the work that led to the *Origin of Species*. This year, one hundred years after the publication of that book, we celebrate its revolutionary impact on biology, on religion, and on the social sciences. But if today we acknowledge Darwin's power to liberate us from false views in those areas of knowledge, we have yet to appreciate his power to liberate

us, as he might, from our superstitions about science and about scientific method. For if it is the case that he did what he did, and did what he said he did, then all our tidy formulae about the logic of scientific method and about the functioning of the mind of the scientist are a fiction.

Let us begin with the worst of it. Charles Darwin was defective in logical rigor, nor did he have the intellectual brilliance of some of his contemporaries. So William Irvine, remarking that Thomas Huxley "enjoyed all the luxuries of genius," goes on to say that "Darwin possessed only the bare necessities. He was a slow reader, particularly in foreign languages. He could not draw. He was clumsy and awkward with his hands, and despite his interest and belief in experiment, he was in some ways oddly careless and inefficient." Indeed, when we compare Darwin with either Huxley or Wallace, we are compelled to believe that Darwin was literally slow-witted. There are moments in his career when we could be tempted to apply to him what, at one

Twenty years after receiving his Columbia Ph.D. in philosophy Robert E. Fitch was "promoted" to theology. Dean of the Pacific School of Religion, now on leave at the University of Hawaii, his books include VOLTAIRE'S PHILOSOPHIC PROCEDURE and PREFACE TO ETHICAL LIVING.

point in his book, he wrote about his earthworms: "Mental Qualities—There is little to be said on this head."

By his own confession he was poor at mathematics, at metaphysics, and at deductive reasoning. Early in life he was impressed by the cool logic of Euclid and of Paley. But if he was impressed, he was not infected. "My power to follow a long and purely abstract train of thought is very limited; and therefore I could never have succeeded with metaphysics or mathematics." As a young man, during the summer of 1828, he retired with a tutor to Barmouth, in a concentrated effort to master mathematics, but "I got on very slowly. The work was repugnant to me." After his return from the voyage of the *Beagle*, he ventured to tackle again "some metaphysical books; but I was not well fitted for such studies."

Only in developing his theory of coral reefs did he elaborate an hypothesis first and verify it later. For the most part he had a distaste for those long concatenations of propositions which so delighted the Cartesians, and in the latter part of his life he turned again to research and to observation as a solace and a retreat from reason.

Worse than this he had no use for the systematic doubt which one might call an article of faith with the devout Cartesian. "I am not very skeptical—a frame of mind which I believe to be injurious to the progress of science." He believed in "positive thinking" rather than in "negative thinking." If one set of beliefs gradually displaced another, this was due to what a famous preacher called "the expulsive power of a new affection." In all affairs, Darwin was eager with his appreciations: "I have no great quickness of apprehension or wit which is so remarkable in some clever men, for instance, Huxley. I am therefore a poor critic: a paper or book, when first read generally excites my admiration, and it is only after considerable reflection that I perceive the weak points." John Dewey, we may recall, possessed a similar sentimental frailty.

But there's worse to be said. There were serious gaps in the logic of Darwin's theory of natural selection. We may be amused at some of the objections raised by William Jennings Bryan: about the origin of eyes being due to the stimulus of light—"Why did not the light waves keep on playing until eyes came out all over the body?"; or about the origin of legs—"Why did man stop

at two legs while the centipede kept on till it got a hundred?" If this is mere silliness on Bryan's part—is it really?—then what of Wallace's protest that natural selection could scarcely account for the brain of a member of a learned society, since the operation of such a principle would give to a savage a brain only slightly superior to that of an ape? Wallace was merely pointing out what Schopenhauer had also remarked—that in fact man has a superfluity of intelligence if the standard is simple survival.

More than this, there were wobbling ambiguities at the base of his theory. He never quite cleared up those bits of business about heredity and environment, or about chance and freedom and determinism, or about mechanism and natural teleology. And he was caught in the comical tension between his innate disposition toward an optimistic view of life and the logic of "Darwinism" which seemed to dictate a far grimmer reality. He resolved this tension, as did Spencer and the other agnostics (dishonestly, we must say), by playing the sensitive humanitarian when chiding the Deity who allowed so much suffering in this world, and by playing the optimist, on the other hand, when he considered how in an evolutionary naturalism the life-giving activities and the pleasure-giving activities must coalesce and triumph in the end.

In any case, Jacques Barzun, in his *Darwin, Marx, Wagner*, is quite entitled to a feeling of irritation at Charles' lack of logical consistency. Barzun speaks in the tradition of that French Academy of Sciences whose perpetual secretary, M. J. P. Flourens, sensing in Darwin an irreverent disposition toward clear and distinct forms and ideas, denounced the *Origin of Species* for obfuscation. But Darwin was an Englishman, not a Frenchman. He was suspicious of logic, and he abhorred what he called the "systematists." He did in biology what Locke did in philosophy, what English statesmen have always done in politics. He muddled through.

But how can muddling, finally, come through? Perhaps the central fact about Charles Darwin's mind was its extraordinary range, sensitivity, and catholicity. Above all, he was a man of large views and of shrewd intuitions.

Now I have no intention of explaining how you get "large views" and "shrewd intuitions"

into a textbook on scientific method. You don't. And that is why scientists like Darwin don't get into such textbooks, either. Rather I wish to repudiate the tradition—dear to religionists and thinkers in the humanities—concerning the fatal effects on Darwin's mind of a narrow specialization. To be sure, he contributed to this canard when he complained, in a letter to Hooker in June of 1868, that he found his "soul too dried up" to appreciate *The Messiah* any more, because "I am a withered leaf for every subject but Science." A few months earlier that year, his wife Emma had written that her husband's "fondness for singing is pretty well merged into Natural Selection." But the important—the beautiful, the instructive—thing is how much of a mind there was in the first place, before the withering—or the flowering—began to occur.

Like any born naturalist Charles Darwin began early his communing with nature—fishing, hunting, collecting bugs, collecting birds' eggs. His father's wrathful outburst—"You care for nothing but shooting, dogs, and rat-catching, and you will be a disgrace to yourself and all your family"—is but the description of a leisurely doper on the natural processes. In the diary of the voyage of the *Beagle*, Darwin is a poet who can christen a toad *Diabolicus*, and write, "it is a fit toad to preach in the ear of Eve." He is a mystic, who knows "feelings of wonder, astonishment, and devotion, which fill and elevate the mind," an esthete who sees in pictures—"a naked man on a naked horse is a fine spectacle." In the next moment he is a scientist and a utilitarian: "The tail of a horse is a very useful appendage." And he is still a sportsman, a good man with a horse and with a gun, in extraordinary contrast to the cloistered hypochondriac he was to become back in England.

If he communed with nature early and long, he also cherished music, poetry, and paintings in the time of his young manhood. Looking back on this period, he wrote, "Up to the age of thirty, or beyond it, poetry of many kinds, such as the works of Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley, gave me great pleasure, and even as a schoolboy I took intense delight in Shakespeare, especially in the historical plays . . . Pictures gave me considerable and music very great delight." His favorite composers were



Beethoven and Handel, and, according to his son Francis, he continued to enjoy good singing until a late age, and could be moved almost to tears by "grand or pathetic songs." This old man was one with the young man who, when he went ashore from the *Beagle* able to carry only one book with him, would take Milton's *Paradise Lost*. We may say, if we like, that the poet, the artist, and the mystic in Darwin atrophied. Or we may believe that they were sublimated in the enterprise of science.

At any rate his mind resembled many others if it turned eventually from poetry to prose. "Books on history, biographies, and travels (*independently of any scientific facts which they may contain*), and essays on all sorts of subjects interest me as much as ever they did," he wrote at the age of sixty-seven. The italics are mine, the parentheses are Darwin's. The point is that throughout life his mind continued to range far beyond the obvious necessities of scientific research. He might have mentioned, in this passage from his autobiography, the many good novels that he and Emma read together. Francis reports that his father was usually at a novel, a biography, and a book of travel at the same time.

The plain fact is that Darwin's was never a desiccated intellect. The reason why those primarily trained in the humanities can still read him with interest and with excitement is that his thought is always rich in human significance—even when it is dwelling upon earthworms. Entering into communion with that mind, one may hold intercourse with a poet, an artist and a scientist come together. Moreover, the wide range of Darwin's sensitivities and appreciations enters into the very texture of his theory. He learns about sex from Schopenhauer, about survival from Spencer, about the emotions from Shakespeare, about the struggle for existence from a Calvinist-Episcopal theologian by the name of Malthus. Here was a mind very far from being withered—by science or anything else.

And what of the "shrewd intuitions" which sort out and select the "large views" which must organize so catholic a temper? We may speak of them as Huxley did of his master: "There is a marvellous dumb sagacity about him—like that of a sort of miraculous dog—and he gets to the truth by ways as dark as those of the Heathen Chinee." We have heard of this philosophic hound

dog before. There is talk of him in (of all places!) the second book of Plato's *Republic*—written, no doubt, when Plato was still young, and rated character on a par with intellect. In any event, so did Darwin sense and sniff and smell his way toward truth. As to defining the logic of this nose, the logic of this mind, the textbooks are perforce silent.

It was in October of 1838—"fifteen months after I had begun my systematic enquiry"—that Darwin happened to read Malthus on population "for amusement." This was the moment when an idea already part of his unconscious heritage moved dramatically into consciousness—the idea of the struggle for existence.

Here, then, I had at last got a theory by which to work; but I was so anxious to avoid prejudice, that I determined not for some time to write even the briefest sketch of it. In June 1842 I first allowed myself the satisfaction of writing a very brief abstract of my theory in pencil in thirty-five pages; and this was enlarged during the summer of 1844 into one of 230 pages.

But the *Origin of Species* was not to appear until 1859. What the slow-witted Darwin took twenty-one years to develop would be grasped by the brilliant Wallace in one week, and developed with superior force and clarity in three years.

But in observing the action of the "scientific mind" we must not miss the heretical affirmation that Darwin had begun his "systematic enquiry" into natural selection at least fifteen months before he was apparently aware of any hypothesis to guide him. His was, indeed, the Baconian method. Moreover, before the "systematic enquiry" there had been the long years of *unsystematic* inquiries, of casual but intimate communications with nature, the collecting of beetles and birds' eggs in childhood, the long walks and talks at Cambridge with Professor Henslow. Later Darwin described his beloved teacher in praise that could have been applied to himself: "His strongest taste was to draw conclusions from long-continued minute observations." It was in such a spirit that Darwin once wrote to Hooker, "I am a complete millionaire" (not in money, mind you, but) "in odd and curious little facts." Indeed, he was more than a millionaire; he was a miser who loved his varied and curious little facts for their intrinsic beauty quite apart from their utility.

In this business of collecting facts, of conducting "long-continued minute observations," Darwin could exhibit a conscientiousness, even a spirit of reverence, that more rational minds would find ridiculous. Irvine reminds us of an evening when Darwin, among company, made the remark that his greatest experience of sublimity had taken place on the top of the Andes. Later Darwin went to bed, while the others sat up. At one A.M. Darwin appeared in dressing-gown and slippers to correct himself: it was in the forests of Brazil, not on the heights of the Andes, that he had most felt the sublime. Who cared? If it was a fact, Darwin cared. And so he cared, too, for the hod-men of science. "He would never allow a depreciatory remark to pass unchallenged on the poorest class of scientific workers, provided that their work was honest, and good of its kind."

But the central virtue in this phase of his inquiry was an unbounded patience. So the son Francis remarked of his father: "He often quoted the saying, 'It's dogged as does it'; and I think doggedness expressed his frame of mind almost better than perseverance. Perseverance seems hardly to express his almost fierce desire to force the truth to reveal itself." It was Francis who also remarked that "he used almost to apologize for his patience."

The saintly virtue of patience, of perseverance: the laborious Henslow had it; the brilliant Huxley had it not. Of Huxley Beatrice Webb once wrote that he lacked "the silent persistency in discovering facts." Wallace had it not, and was aware of his deficiency: "For I have not the love of *work, experiment and detail* that was so pre-eminent in Darwin, and without which anything I could have written would never have convinced the world." A mule could have it—only in this case, as Darwin recorded at Portillo Pass, while paying tribute to the animal's reason, memory, and social affection, we might call it "obstinacy." But Herbert Spencer had not this virtue of the mule; he was, like Huxley, like Wallace, too brilliant and too impatient a man to be bothered with painstaking investigations when the conclusion could be more swiftly reached by sharp deductions. Compared to these men, Darwin, in Irvine's phrase, must have "always felt desperately behindhand, like a tortoise concentrating every energy on the next step, as he

creeps in frantic haste toward impossible horizons."

I would suggest, however, that the earthworm, better than the tortoise, symbolizes the Darwinian virtue. Darwin wrote a tribute to this humble annelid in *The Formation of Vegetable Mould Through the Action of Worms, With Observations on Their Habits*, describing how "in many parts of England a weight of more than ten tons of dry earth annually passes through their bodies and is brought to the surface of each acre of land." At the end of the book, he states, with utter admiration: "It may be doubted whether there are many other animals which have played so important a part in the history of the world, as have these lowly organized creatures." Hardly a "lowly organized creature" himself, he felt an affinity with all creatures of patient industry.

It was more than a feeling of affinity. And here, perhaps, we come to the essence of the man and the scientist. He felt affection. He felt love. He could carry the meaning of the *Origin of Species* through the *Descent of Man*, not thinking of men as beastly, but of animals as close to human. The book reviewer who commented on *The Formation of Vegetable Mould* by saying that it marked a rehabilitation of character for what had been a "mere blind, dumb, senseless, and unpleasantly slimy annelid" spoke more truth than whimsy: "The earthworm steps forth at once as an intelligent and beneficent personage, a worker of vast geological changes, a planer down of mountain sides . . . a friend of man . . . and an ally of the Society for the Preservation of Ancient Monuments."

Darwin's feeling for this creature went back to that time in his childhood when, as an angler, "I was told that I could kill the worms with salt and water, and from that day I never spitted a living worm, though at the expense probably of some loss of success." This was part of the discipline which, in collecting birds' eggs, forbade him to take more than one egg out of a nest. It was part of that sensitivity which caused him—"almost," he says—to collect only insects that were already dead, when his sister persuaded him that it was not right to kill them only for the sake of a collection. This same young man, when he went ashore from the *Beagle*, would interrupt

his observations to rescue a spider from a wasp, and, on another occasion, to rescue a wasp from a spider. Any creature frail and tender and helpless—a worm, a woman, a beetle, a baby, a slave, an insect—could arouse his ardent sympathies. So Emma, with a sound instinct, when she was considering marriage to the young Charles, wrote to Madame Sismondi that, among his other qualifications for being a good husband, was that of “being humane to animals.”

Indeed he could not tolerate cruelty, and the suffering of others brought him the deepest anguish, even interfering with his preparation of a study of the expression of the emotions in men and animals; he tried to observe accurately a crying child—and was entirely unnerved. Earlier in life, he was prevented from completing his medical studies at Edinburgh, where he saw “two very bad operations, one on a child . . . rushed away before they were completed,” and never attended again. He experienced dialectical agonies on the subject of vivisection. As a professional man he felt it must be justified for investigations in physiology, but “not for mere damnable and detestable curiosity.” So he bravely championed the scientific rationale in the *Times*, but then sought to dismiss the matter from his mind. “It is a subject which makes me sick with horror, so I will not say another word about it, else I shall not sleep tonight.”

This extreme sensitivity to suffering was but the obverse of an affirmative delight in the excellence of every living thing. The son Francis has given us the revelatory phrase in telling about his father’s love of flowers: “I used to like to hear him admire the beauty of a flower; it was a kind of gratitude to the flower itself, and a personal love for its delicate form and colour.” I have intruded again with my italics because this might be the text of an entire discourse.

For a scrutiny of a few of the letters in the early 1860’s, during the botanical work, shows the constant recurrence of certain adjectives of ecstasy as applied to his specimens—“marvelous . . . transcendent . . . beautiful . . . wonderful . . . admirable . . . unparalleled . . . splendid.” At the same time he can write to Asa Gray, in protest at the latter’s lack of appreciation of his insectivorous plants: “You are unjust on the merits of my beloved *Drosera*; it is a wonderful plant, or

rather a most sagacious animal. I will stick up for *Drosera* to the day of my death.”

Now it is not permissible to put all this down as typical Victorian sentiment. It may be typical, but it is genuine. And in understanding Darwin it is absolutely fundamental. Certainly he was perpetrating what Ruskin snootily dismissed as “the pathetic fallacy.” And he was doing it, not in literature, but, worse yet, in science. He was ardently theriophilous. This is why, at the end of the *Descent*, he could speak warmly of his “heroic little monkey” and of his “brave old baboon” as though it were to confer a favor upon man to assimilate him to such admirable company. If all this is silly, we must call Albert Schweitzer and all “reverence for life” merely silly.

But to understand Darwin we must dismiss that cold nonsense about the objectivity and the impartiality of the scientist. Darwin is incorrigibly partial, inextricably involved. He is not detached; he is profoundly attached. He is not the distant observer; he is the intimate lover.

And after all, it is not such a new thing for an Englishman to love his animals. The bright and brainy men of the day—Wallace, Spencer, Huxley—would never understand this love. A Saint Francis could understand it, and I will insist on the analogy. With Darwin, the transition from natural piety to natural science took place in the lifetime of one man; among the Franciscans the transition required the partial lifetime of an entire Order. Yet both the scientist and the saint could appreciate the mysterious efficacies of love. For if one will not love, one will not learn. It is only love that yields patience, as it is only love that yields insight. Love may neglect the niceties of logic, yet love enlarges the imagination and enhances the sympathies. The genius of Charles Darwin was not that he had an intellect which could tower to the stars. It was that he could feel empathy with an earthworm.

WORLD POVERTY AND AMERICAN POLICY

by PETER B. KENEN

In firm and orderly fashion, a young economist explains why we have not yet begun to satisfy the obligations of sense, let alone morality, in our "program" of foreign economic aid—and the ways in which we might begin.

Since the Second World War, the peoples of Asia, Africa and Latin America have grown restless. From Caracas, Leopoldville, Cairo, Beirut, and Djakarta comes evidence of their discontent, which the facts of economic life alone cannot explain. But neither can their foreign policies nor their bitter civil strife be understood without an appreciation of their economic circumstances.

The underdeveloped countries contain more than half the world's population, but produce less than a fifth of the world's output. Living standards in Asia, Africa, and Latin America are therefore far below those prevailing in Europe and North America. The gap, moreover, is widening. Population growth in the poorer countries has exceeded the increase in their income, while production has outstripped population growth in wealthier countries.

The peoples and governments of the underdeveloped countries have come to appreciate the possibilities of economic growth and to regard such growth as an inalienable right. They look to their more fortunate friends for assistance. Back in 1949, a group of economists reporting to the United Nations suggested that the underdeveloped countries ought to sustain at least a two per cent annual increase in income per person. Such an increase, they pointed out, would barely suffice to keep the gap between underdeveloped and developed countries from widening. The economists then argued that the underdeveloped countries cannot furnish even half of the capital required to achieve that minimum of two per cent. A very large part of the necessary money has to come from abroad.

These circumstances pose three questions for American economic foreign policy. First, have we an obligation to assist the underdeveloped countries? Second, is our present foreign aid program adequate to the needs of those countries? And third, do our trade and tariff policies help or hinder them?

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In meetings of the United Nations, Asian, African, and Latin American representatives insist that the wealthy nations, especially the United States, which enjoys the world's highest standard of living, should help the poorer ones to finance development projects. For many years, our representatives have been reluctant to acknowledge any *moral* imperative to do so. Indeed, our spokesmen repeatedly warned that economic aid would soon be discontinued, that we could not program foreign aid on a continuing long-term basis. The United States urged instead that the underdeveloped countries attract private American investment.

During the last two years or so our government has begun to change its position. Washington has come to recognize that private capital will not come forward in quantities adequate to finance the minimum programs of underdeveloped countries, and that some of the projects which must be undertaken in those countries—such things as transport and irrigation programs—can never yield a profit sufficient to justify private investment. We have also come to understand that trade is no substitute for aid, that aid supplements the resources of underdeveloped countries, while trade does not. And while we are still reluctant to acknowledge that we have a moral obligation toward the poorer countries, we have learned that this doctrine is deeply rooted abroad and influences other countries' attitudes and policies. It does us no good to deny that we have an obligation to other countries, for they believe we have, and act accordingly.

Unfortunately, America's response to the needs of the underdeveloped countries remains inadequate. United States economic aid in fiscal 1959 totaled \$1,476 million. But \$773 million of that sum was allocated to "defense support" and was spent in Korea, Formosa, Vietnam, Turkey, Spain, and other countries armed by the West. Another \$150 million was used for technical assistance—to supply directly and through the United Nations the services of specialists in problems of agriculture, industrial planning, health, and in related fields. And \$60 million more was spent for refugee relief and other emergency programs, in the Middle East and elsewhere. The remainder, a bit under \$500 million, was supplied as grants and loans for economic develop-

ment. The loans were furnished by a new government agency—the Development Loan Fund—established by Congress in 1957.

The DLF makes long-term loans at low interest rates, repayable in local currencies rather than in dollars. At first the Development Loan Fund was authorized to lend just \$300 million. In 1958 Congress increased its resources to \$700 million. But by the end of September 1958, the DLF had committed itself to loans totalling \$456 million and had in hand loan applications for another \$2,100 million. By the beginning of 1959, President Eisenhower informs us, the Development Loan Fund had committed all of its resources. The President has therefore asked Congress to supply the Fund with an additional \$925 million. This is a great deal of money but it falls far short of the total of applications already received, let alone those which are likely to arrive from underdeveloped countries during the coming year.

To make matters worse, the President's 1960 Budget asks for only \$668 million for direct economic aid, for technical assistance, and for the emergency relief programs to which we are committed. And if Congress runs true to form it will cut back this modest request. The Development Loan Fund, then, emerges as the frail mainstay of our aid program for underdeveloped countries. It is frail, not only because it is poorly endowed, but also because its operations have all the disadvantages of grants and many of the disadvantages of loans. Because DLF loans are repayable in inconvertible currencies, the agency's funds will not "revolve." Congress will have repeatedly to enlarge its total capital. The underdeveloped countries must nevertheless find funds with which to repay us, and there are bound to be difficulties when that obligation falls due. The United States will find itself holding vast sums in currencies for which it has little use. We have, in fact, already accumulated large amounts of Indian, Pakistani, and other foreign currencies by selling surplus agricultural commodities under Public Law 480, and have had difficulty managing these balances so as not to disturb the monetary system in underdeveloped countries.

Surely, the program to which we are committed—centered as it is on an inadequate loan system—is unsatisfactory in relation to the needs of the underdeveloped countries and Lilli-

putian in relation to our resources.

And it does not sufficiently exceed Soviet assistance. England's Alec Nove, in *Lloyds Bank Review*, estimates that Soviet bloc credits and grants now available to the underdeveloped countries total \$1,270 million; Soviet credits and grants to Asia, Africa and Latin America have reached \$1,970 million, and the underdeveloped countries have already used \$700 million. Some of this assistance has, of course, been provided in armaments, and much of it is short-term credit. And we may insist—with pride—that free world assistance to the countries receiving Soviet loans greatly exceeds that furnished by Moscow. The United States, through the DLF, the Export-Import Bank, and under other programs, has alone provided many times the sum ostentatiously proffered by the Russians. But the underdeveloped countries may be greatly flattered by invitations to Moscow's debut as an international lender. Moreover, the fact that the Soviet economy has advanced to a level at which it can spare resources to assist others is itself of profound political significance, and the Russians' generosity to "neutrals" in the distribution of credits is still more embarrassing to the West. They have pledged about \$925 million to Nasser's United Arab Republic, \$320 million to India, and \$250 million to Indonesia. Moscow has concentrated upon the most susceptible of the underdeveloped countries.

We certainly ought *not* to outbid the Russians project by project, country by country. Were we committed to do so, the Soviets could dictate the distribution of our foreign aid program, merely by making irresponsible offers they had no intention of honoring. As this country has chosen to make foreign aid scarce, we must disburse it carefully, financing those projects which promise the greatest gains in income to the poorer countries. We cannot afford to spend just as Moscow desires.

To offset Russian political gains on account of foreign aid and to show the world how very much more generous our own efforts are, we should instead sponsor an International Development Association to make loans or grants to the underdeveloped countries. The United States and other free countries would furnish the Association's capital and would call upon the Russians to con-

tribute. The creation of such an Association has been proposed by Senator Mike Monroney and has been promised sympathetic study by the Administration's able Undersecretary of State for Economic Affairs, C. Douglas Dillon. Were such an international agency established and were it to be directed jointly by donors and recipients, the allocation of assistance for economic development would be removed by one step from cold war maneuvering. At the same time, the contributions of free nations would dwarf those of the Soviet bloc, putting Moscow on the defensive. Such an arrangement, moreover, would probably enlarge the total of funds available for economic development; it would encourage contributions by other free countries, especially in Western Europe. With few exceptions, these countries cannot furnish enough assistance separately to justify establishing their own foreign aid programs.

An increase in United States foreign aid and the creation of an International Development Association to allocate that aid are not enough. The United States must help to solve one of the most pressing and complicated problems besetting the poorer countries:

Many of them produce only one or two commodities for export. These are generally raw materials or foodstuffs, and their prices are notoriously unstable. In fact, the prices of these basic commodities fell precipitously in 1957-58. Meanwhile, the prices of machinery and other manufactures, the goods which underdeveloped countries import, have been rising. A group of prominent economists consequently estimated that the terms of trade—the ratio of export to import prices—of underdeveloped countries declined by some ten per cent during the twelve months ending March, 1958. Since then, they have fallen further. As the underdeveloped countries' terms of trade deteriorate, their development programs must be cut back, for they cannot purchase the machinery and industrial materials they require. In the past year or so, one such country after another has therefore sought special assistance from the International Monetary Fund, straining the resources of the IMF. For this reason, among others, President Eisenhower has proposed that the United States increase by fifty per cent its subscription to the

IMF. Other countries will do the same.

But the foreign exchange supplied by the IMF must be repaid. It therefore postpones, but does not eliminate, the need for a comprehensive price stabilization program. Unfortunately, only sporadic international efforts have been made since the war to stabilize commodity prices. Agreements are in force for wheat, sugar, and tin. Other important commodities have been neglected. And the arrangements which have been negotiated are not entirely successful. Commodity agreements which seek to stabilize prices at high levels generally resolve the short-run problem of instability by creating a long-run problem of surplus disposal. When prices are stabilized at artificially high levels, supply exceeds demand and surpluses accumulate.

This difficulty is, of course, identical to that posed by the United States' own price support program. The solution which has been proposed for our farm problem may therefore be appropriate for world markets. Some years ago, the Secretary of Agriculture, Charles Brannan, urged that we stop supporting farm prices, that we let supply and demand determine prices in the open market. He urged that we subsidize the farmer directly, instead of maintaining high prices. This proposal would have lowered prices to the consumer and eliminated the problems of surplus storage and disposal.

The Brannan plan was never adopted in the United States but it could be revived to stabilize the income from foreign trade of underdeveloped countries. Instead of supporting food, fiber, and minerals prices, we might agree to indemnify in whole or in part the country producing these products were prices to fall below an agreed-upon level. Conversely, the producing countries could agree to indemnify consumers were market prices to rise above that level. There are admittedly great practical difficulties in the way of such agreements. The consumers will seek to set the "reference" price low; producers will try to jack it up. These difficulties, however, ought not to deter us from entering into preliminary negotiations with some of the underdeveloped countries involved.

The problem requires immediate solution because the long-range development programs of the poorer countries are jeopardized by price

fluctuations, and because the Soviet Union has emerged upon this field, too, as champion of these same countries.

To illustrate: in recent years the Russians and their satellites have purchased large quantities of cotton from Egypt, Afghanistan, and Iran, of rice from Egypt and Burma, and of rubber from Indonesia. These purchases have removed from the market surplus commodities which would otherwise have depressed market prices. In effect, the Russians have engaged in a price support program of their own, concentrating as usual upon those countries which are most susceptible to economic and political penetration. To be sure, the Russians require these commodities for their own use. Their motives are economic as well as political, and they have sometimes driven a hard bargain. But the contrast between their posture and ours is striking. They have been buying cotton and rice. We have been selling them.

During fiscal 1957, the United States exported \$1,115 million worth of cotton. These exports were subsidized by our government and have provoked bitter protests from countries relying heavily upon agricultural exports for foreign exchange. Our cotton program has sown anger in Peru, Brazil, the Sudan and other places, while American shipments of wheat have exacerbated already strained relations between the United States and Canada. To placate our allies the United States tries to insure that our sales of surplus agricultural commodities do not displace the exports of other countries. We have not been remarkably successful.

The most obnoxious and perverse American policies, however, are our import restrictions. This country has systematically limited its purchases of several commodities important to other free countries. During 1958 the President imposed quotas on imports of lead and zinc, to the consternation of Canada and certain Latin American countries. In 1957 the government curbed petroleum imports, alleging that those imports were discouraging the exploration and expansion of our petroleum reserves. Petroleum is admittedly vital to the national defense. But that fact argues that we ought to conserve our own supply and encourage exploration and development in nearby countries, especially in Venezuela and Canada. Prudence does dictate

that the West reduce its dependence on Middle East oil, as political developments short of war could deny us access to that region's rich fields. Only one circumstance, however, could cut us off from the Canadian and Venezuelan fields—a nuclear war. And if such a war were to break out, we would have to fight with the oil on hand, not that which we might bring out of the ground. The great destruction which would be visited upon us in the first days of total war could render our own oil industry inoperative.

Finally, an overhauling of our trade policies is all the more necessary because of recent developments in Western Europe. At the beginning of this year, six European countries—France, Italy, West Germany, Belgium, Luxembourg, and The Netherlands—set out upon the road to economic union. At the end of fifteen years, they will have dismantled all barriers to trade among themselves. As a first step they have reduced their tariffs on each others' goods by ten per cent. The European Common Market will ultimately bring great benefit to its six members and, therefore, to the community of free nations. In the process, however, American exporters may be materially injured. The present plan for tariff reductions in Western Europe itself implies discrimination against America. And the Common Market countries may *intensify* their restrictions on goods coming from the outside world. As the tempo of economic growth has slackened in Western Europe and as a species of stagnation may prevail for some time, there is a real danger that the Common Market countries will use tariffs to "export" unemployment. Protectionism is the evil twin of recession, abroad as in the United States.

In order to defend its exporters against recrudescing protectionism in Europe, the United States will have to enter into aggressive tariff bargaining with members of the European Economic Community. At present, however, this country is incapable of such negotiations. The Reciprocal Trade Agreements Program, reenacted by Congress last year, gives the President new authority to swap tariff concessions with other countries. That authority, however, is so narrowly circumscribed that the President cannot offer to other countries the concessions that will be necessary to preserve American export

markets. The "peril-point" provision in our Trade Agreements Act virtually forbids concessions which would injure an American industry. And a producer who finds the market for his product shrinking on account of a change in consumer tastes or technology may resort to "escape clause" proceedings to recover his losses by cutting imports.

In point of fact, very few tariffs have been raised on account of "escape clause" action, but the threat of such action has doubtless discouraged many foreign producers from entering the American market. The President, moreover, has been unable to trade important new concessions with foreign countries because it is almost certain that these concessions would be nullified by "escape clause" proceedings.

Let it be quite clear that no responsible official or economist wants a portion of American industry exposed to dreadful injury so that other firms may maintain their overseas markets. What is often and properly urged is the gradual reduction of our tariffs, and such financial and technical assistance to injured producers as they require to enter upon other lines of business. This twin proposal is intended not only to benefit our export industries, but also to benefit the American consumer. It would grant him access to inexpensive foreign products, in those instances in which foreign producers can supply goods more cheaply than American producers, and would most efficiently employ our own resources.

To return to the three questions I posed at the beginning of this survey: It is clear that the United States cannot ignore the demand for economic development abroad and that we have not yet begun to satisfy that demand. At the very least, we must enlarge our foreign aid program. Better still, we should enthusiastically sponsor an international program of economic assistance—an International Development Association. Finally, we must overhaul our trade and tariff policies and our system of farm price supports, to assist other countries in need of American markets and to raise the standard of living at home.

These proposals are no substitute for effective diplomacy. But diplomacy is impotent without them.

CÔTE D'AZUR

by LOUIS SIMPSON

Christian says, "You know, it's Paradise,"
Mending his net.
"The English," he says, "for example . . .
They come and lie in the sun until they are
As red as that roof.
And then it's finished. They never recover."

The howling native children,
Roland, Giorgio, Josette, plunge in the sea,
Scramble on a raft, inspect
The official from Lyons with his glass rod
And nylon gear.

"I know," Roland informs him,
Where you could have bought all that much cheaper.
That's not much of a rod."

"And you,"
Replies the head of the bureau
To his tormentor, "What kind of a rod
Do you have?"

Roland shrugs.
"Me?" he says. "I don't have all that money."

And here comes an excursion *en famille*.
First, they erect a yellow canvas tent
Which swallows them. Then mama-pig comes out
On her white trotters; whining daughter-pig;
Boy-pig and Baby. Look, the blossoming

Holder of two Columbia degrees and instructor in English at Columbia, Louis Simpson is the author of two books of poetry: GOOD NEWS OF DEATH, published in 1955, and A DREAM OF GOVERNORS, coming out this fall. His poems have appeared in THE NEW YORKER and PARTISAN REVIEW.

Of beach-umbrellas, uncollapsing of chairs!
And last emerges the head of the family,
His face encased in glass, his feet
Froglike in flippers.
Out of his head a kind of man-from-Mars
Tube curls; his right hand grasps a trident
For finding the sea-urchin. *Me voici!*

Here and there on the beach the solitary
Brood in the sun—Dutchman and Swede;
An actress in dark glasses
Reading a book; heroes and heroines
Of melodramas that are to be played:
The shot in the hotel; the speech
From a platform; the performance
Of Bach that brings the audience to their feet
Roaring in Dusseldorf.

Humankind, says the poet, cannot bear
Too much reality.

Nor pleasure.
And nothing is more melancholy
Than to watch people enjoying themselves
As much as they can.

The trick is to be busy
Mending your net, like Christian,
Or active as the father is out there
With all his tackle.

Look! he's caught
An octopus.

The children come running,
And even the Swede
Stands up to look; the actress
Smiles; and the official from Lyons
Forgets himself in the general excitement.

RUTH BENEDICT:

The Woman as Anthropologist

by RICHARD CHASE

Her memoirs, notebooks and poems express the passion, the grief — the feminism — of the extraordinary author of *PATTERNS OF CULTURE*, who rendered anthropology in marvelous prose.

With the exception of Franz Boas, Ruth Benedict (1887-1948) was Columbia's best known anthropologist. She was also one of the remarkable women of her time. This became clear to those outside the realm of anthropology with the publication in 1934 of *Patterns of Culture*, a book which has been more widely read and has had more influence than any anthropological work except *The Golden Bough*. It was apparent from that book that Mrs. Benedict had broad intellectual sympathies, especially with literature, and it was this that led some of my contemporaries to come under her influence in graduate-school days. The great modern writers—Eliot, Joyce, Yeats, Lawrence—were interested in myth, ritual, and primitive customs as no previous writers had been, and we turned to the anthropologists for help in explicating *The Waste Land*, *Finnegans Wake*, and *The Plumed Serpent*, as well as for light on the nature of literature, culture, and religion in general.

I remember Mrs. Benedict as a grateful Ph.D. candidate remembers a helpful professor (she was, absurdly, only an associate professor). I sat in on one of her courses, and talked with her about literature. This was in 1942 and 1943, just before she embarked on those arduous war-time duties in Washington which, there seems no doubt, led to her death at the age of sixty-one. Even before going to Washington she seemed to be deeply tired, and one wondered what long ordeals she had been through. She still retained some of the wistful beauty her photos show her to have had in youth. She was obviously a woman of strong mind, an impression which her diffidence and lack of ready talk did not dispel. She was most receptive to my Ph.D. project, which had to do with the mythic components of literature, and we both felt, I believe, that we were practicing those interdepartmental relationships which everybody praises but few do anything about.

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Literary people turned to Ruth Benedict partly because she wrote so well. But more important, we admired her because, unlike many American anthropologists, she generalized on the materials she presented and because these generalizations appeared to be not only provisionally sound but to bear in various ways upon some of the difficult issues of modern times. My studies had led me to read European proto-anthropologists and mythographers from Euhemerus and St. Augustine on down to Vico, Herder, Voltaire, Bastian, Tylor, and Frazer. They all had theories about primitive culture and the nature of myth that a curious graduate student found most heady and exciting. But compared with them, the American anthropologists, typified for us by Boas, the George Washington of Columbia anthropology, seemed singularly dull and opaque. Like many elder psychoanalysts and anthropologists, Boas wrote English in a way which proved that German was his native tongue, and his cumbersome prose was loaded down with "insights," "outlooks," "standpoints," and so on. Boas, we understood, wrote and thought the way he did because his mission was mainly to rescue and codify, before it was too late, whatever could be known at first hand about the rapidly disappearing American Indian cultures, and he was too absorbed in this monumental task to worry about writing well or to conceptualize his data in such a way as to make his ideas attractive to the general reader.

Mrs. Benedict, of a younger generation, was not primarily a field worker nor a codifier of field materials. On the other hand, neither was she a pure theorist. She was versatile and eclectic and was able to do everything, from grubbing hard in research to writing and thinking well. She seemed to us the ideal anthropologist.

Thanks to Professor Margaret Mead's new book, *An Anthropologist at Work: Writings of Ruth Benedict* (Houghton Mifflin), it is now possible to know much more than before about the woman one remembers and about the growth of the mind that fashioned works like *Patterns of Culture* and *The Chrysanthemum and the Sword*. The book is partly biography, partly autobiography, and partly a collection of Mrs. Benedict's shorter essays, both published and

unpublished. The sections of the book are chronologically arranged, and Miss Mead has provided enough running comment to give us a fairly continuous but not a complete sense of the course of Mrs. Benedict's life. The anthropological essays include such things as "The Vision in Plains Culture," the exquisite short piece called "Cups of Clay," "The Uses of Cannibalism" (an ironical piece in the manner of Montaigne, suggesting that ritual cannibalism be established in Western civilization as a humane substitute for war), and "An Introduction to Zuñi Mythology," as well as pieces reflecting the preoccupations of Mrs. Benedict's last years, such as "The Bond of Fellowship" and "Race Prejudice in the United States."

The earlier essays are the most interesting, and good as her later pieces are, it nevertheless seems an unfortunate waste and misdirection of talent that Mrs. Benedict's strong political feelings and her laudable sense of duty should have led her to convert anthropology to the purposes of public relations and wartime "intelligence." Many people have had the (doubtless erroneous) impression that of late years the entire effort of anthropologists has been devoted to assessing the effect of baby-swaddling on the Russian character, a matter Mrs. Benedict considers in her article called "Child Rearing in Certain European Countries." It is too bad, by the way, that Miss Mead has not included in this book the lively essay called "Human Nature Is Not a Trap" (*Partisan Review*, March-April, 1943).

Besides the essays, the reader will find many illuminating excerpts from Mrs. Benedict's diaries and journals, going back as far as 1912; "The Story of My Life," a fragment of autobiography in which she analyzes her childhood; letters, including many written by the anthropologist Edward Sapir, who became Mrs. Benedict's close friend after she took up, at the age of 33, the study of anthropology; poems, not only by Mrs. Benedict, but by Sapir and Miss Mead herself; and finally the beginning of a feminist work on Mary Wollstonecraft, Olive Schreiner, and Margaret Fuller that had occupied the first years of Mrs. Benedict's marriage but that she left unfinished.

Not surprisingly, we hear much in *An Anthropologist at Work* about a double life. From the

beginning Ruth Benedict thinks of herself as living in two worlds. As a woman she believes that her greatest contribution is to give love to the man who seeks it and to bear children. But her marriage turns out to be childless and unhappy, and she is determined to pursue a career, even though what she gives in this guise will, as she says, be the "second-best" that she has to offer and even though "the vital principle" will have gone from her life. She cries out, at the age of twenty-five, "To me it seems a terrible thing to be a woman . . . it is all so cruelly wasteful. There are so few ways in which we can compete with men." Her deep depressions, carried over from childhood, lead her to brood on her contradictory sense of herself as homemaker and potential careerist. But there is another manifestation of her sense of doubleness too, for she hopes to become a recognized poet, and is attracted to a realm of ideal beauty sharply at odds with the disorder and imperfection of her emotional life.

She finds the origin of her doubleness in the "primal scene" that occurred in childhood by the coffin of her father. She writes that her mother "took me into the room where he lay in his coffin, and in an hysteria of weeping implored me to remember. Nothing is left to me consciously of this experience, but if it is suppressed it would go a long way to explain the effect my mother's weeping has always had upon me. She made a cult of grief out of my father's death, and every March she wept in church and in bed at night. It always had the same effect on me, an excruciating misery with physical trembling of a peculiar involuntary kind which culminated periodically in rigidity like an orgasm. It was not an expression of love for my mother, though I often pitied her. The effect was devastating, an effect that would be intelligible if it were a calling up of my 'primal scene,' the forgotten hour when my mother had implored me to remember, and, loving my father's face, I violently repudiated her and her grief."

Mrs. Benedict believed that this "tragic scene" led her to live both in "the world of my father, which was the world of death and which was beautiful, and the world of confusion and explosive weeping" she associated with her mother.

This remarkable bit of analysis, with its vivid

picture of order and chaos, tells us much not only about Mrs. Benedict's poetry, but about the origins and perhaps the nature of her anthropology and her political liberalism. At any rate, she is concerned in her anthropology to find in the miscellaneousness of cultural traits the fixed form, the aesthetically perceived pattern. She is drawn to passivity, reconciliation, and harmony, to what she calls, after Nietzsche, the Apollonian character of certain cultures. Her social ideal came to be "cohesion . . . with a minimizing of individual aggression and frustration." However laudable this ideal may be, however well it accords with much modern liberal doctrine, one cannot help seeing in it a too bland social order in which masculine aggression is stilled and feminine frustration assuaged, as such an order might be imagined by the youthful feminist who once stood by her father's coffin.

And it is impossible not to see the feminist, rather than the entirely independent mind, in the last pages of *Patterns of Culture*, where images of male dominance are toppled one after another, where the Puritan divines of New England are pictured as neurotic monsters and where our culture is said to encourage "family men, as officers of the law and in business" to manifest "extreme forms of ego-gratification." These "arrogant and unbridled egotists," she says in support of her contention, people the pages of contemporary American fiction and drama. But this is not true; surely, our modern literature portrays twenty meek, if blustering, babbitts to every ruthless tycoon or sadistic family tyrant.

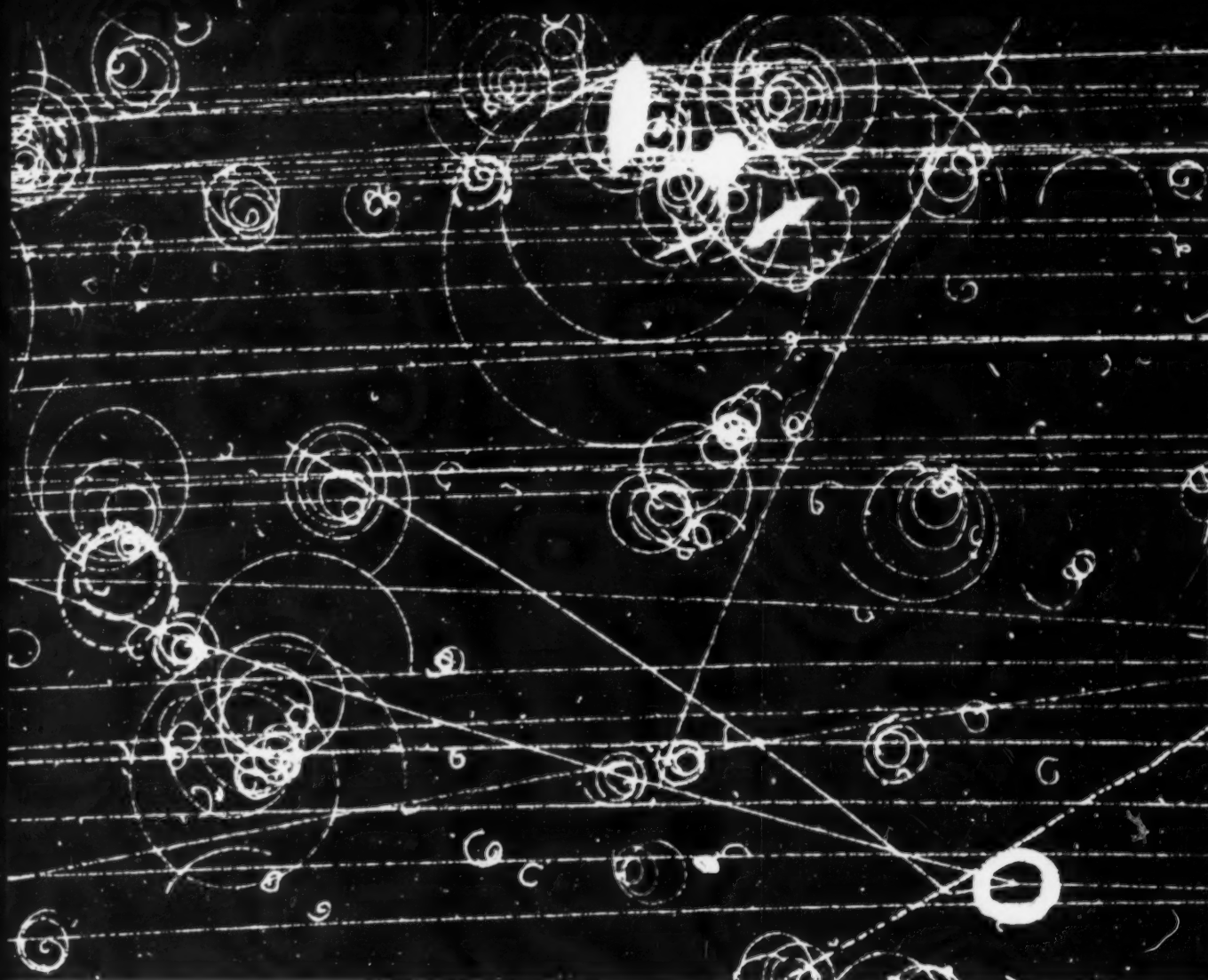
Boas and the next generation of anthropologists, such as Mrs. Benedict, Miss Mead, and Sapir, were, for all their humane temper, somewhat isolated from the modern intelligence. Mrs. Benedict was a graceful poet, and it would be a pleasure to quote some of her verse if there were space enough here (characteristically her poetic *persona* had a different name: Anne Singleton). But her poems—full of brief intensities, anguishes, longings, and fugitive fulfillments—are conventional items in the House of Untermyer, and as far as one can make out she had no interest in Pound, Eliot, Stevens,

Frost—the poets, that is, who were making twentieth-century poetry. In the years before World War II Boas and his co-workers had been rather naive in their support of Popular Front movements. Miss Mead reports that Ruth Benedict's reaction to charges that some of the movements she supported were Communist-dominated was a shrug of the shoulder, suggesting that if people wanted to go in for Christian Science, Anglo-Catholicism, psychoanalysis—or Communism—well, that did not concern her. Although she admits that her colleagues made political mistakes, Miss Mead uses the famous word "disgruntled" in referring to those liberals and leftists of the thirties and forties who took a clear stand against the Stalinists. The word Stalinists she puts in quotation marks, and it is not clear whether she is quoting someone or calling into question whether in fact there ever were such people.

Miss Mead writes approvingly that Ruth Benedict committed herself to no church or party or theory of life. She did not, as Miss Mead chooses to say, "vanish into the maw of some completely accepted orthodoxy." She abandoned the religion of her family, although her poems are sometimes on Christian themes and although she exclaims, upon seeing the cathedral of

Notre Dame, "Isn't it unbearable that it is all about nothing?" It does not seem to me a good thing, in and of itself, to remain non-committal, and in any case *An Anthropologist at Work* shows that actually Mrs. Benedict was passionately committed to the Party of Woman. This book forces us to think of her as so committed and to reflect that, like any strong allegiance, hers gives her work a certain bias (but also a certain clarity and intensity) which neither scientific scholarship nor the well known moral relativity of modern anthropology can conceal.

It is of the greatest interest that in the last year of Ruth Benedict's life her strong nature made her turn back to an earlier self, the literary self she had in part abandoned in becoming an anthropologist. In her address as retiring president of the American Anthropological Association, she does not speak of anthropology as an adjunct to bureaucracy or political publicism or as a science. Instead she makes a "heretical statement," saying that "to my mind the very nature of the problems posed and discussed in the humanities is closer, chapter by chapter, to those in anthropology than are the investigations carried on in most of the social sciences."



Particles photographed in a "bubble chamber." Negative pi mesons rushing through liquid hydrogen leave continuous trails of boiling bubbles tracing some decay processes. Lateral lines left by mesons, whorls by electrons. At lower right, pi meson coming from right splits into K-plus meson, which starts upward, Sigma-minus hyperon, which curves down.

THE NEW PARTICLES OF PHYSICS

by JAY HOLMES

A general explanation of what particle physicists, at the frontier of physics, are finding out about the ultimate stuff of the Universe: about "parity," "antimatter," and energy.

In the beginning, Genesis tells us, God created the heaven and the earth. It was not until the next day that He directed that there be light. According to this tradition, matter was formed before energy.

It was Albert Einstein who in 1905 originated the idea that matter and energy are the same. Until then, they were considered two different things. Einstein's famous equation, $E=mc^2$, states that a very small piece of matter is equiv-

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alent to an exceedingly large amount of energy. Ever since the Hiroshima bomb demonstrated that it is possible to make use of the transformation of mass into energy, the world's attention has been held fast by the implications—for good and ill—of this fundamental physical process.

Now, at the frontiers of physics, experimenters are exploring the reverse process. They are making tiny, fleeting bits of matter from pure energy.

A new branch of physics has evolved. The boundary of knowledge has moved beyond nuclear physics, the examination of the atomic nucleus. Now the outer limit is the study of nuclear particles—even tinier bits of matter extracted by the shattering of the nucleus into its component parts.

The particle physicist, like most searchers for fundamental knowledge, has no idea, and often no interest in, what use will be made of the information he discloses. His motive is curiosity. But society's motive in supporting his search is quite different. History tells us that life is comfortable today primarily because of the quest for fundamental knowledge by men who could scarcely have cared less about how the knowledge might be applied.

What are nuclear particles? No one knows. They may be the tiniest bits of the stuff of the universe. Many particle physicists believe that the list of elementary particles now known comes close to such an ultimate division of matter. Nevertheless, it may be possible, at some future stage in the progress of science, to break some of today's elementary particles into still smaller pieces. In fact, it is conceivable that there may be an infinite series of such refinements to be accomplished in man's investigation of physical Nature. Perhaps the structure of things is like the proverbial infinite series of fleas on the dog: each flea has a smaller flea that bites him.

One of the difficulties in discussing elementary particles is an old bogey: definition of terms. How does one define "a particle"? What do we mean by "elementary"?

To answer the easier question first, a particle is a thing. When used by physicists, the adjective "elementary" applied to a particle defines it as a thing that cannot be described fully by

a combination of the properties of other "elementary" particles. It is a thing for which current theory fails to account in its exposition of those particles it already postulates as elementary.

For an example let us go back to the state of physical theory in 1890. At that time, the elementary particles of matter were atoms. Chemistry knew of a little less than 100 different kinds of atoms, representing that number of known elements. The theory of the day was incapable of describing the atom as a combination of other elementary particles.

In 1896, however, the Englishman J. J. Thomson discovered the electron; and in 1912 another Englishman, Ernest Rutherford, proposed the concept of the nucleus. With these two advances in theory, it became possible to describe the atom in terms of a nucleus and a number of electrons. The number of electrons and the amount of electrical charge in the nucleus distinguished atoms of one element from those of another. Thus it had become possible to describe the atom fully by a combination of the nucleus and the electrons. The atom was no longer an elementary particle.

Thus the definition of an elementary particle depends on the state of the current theory. The theory depends on the nature of the experimental facts at hand and the scientist's ability to perceive and communicate to his colleagues their underlying patterns. The facts in turn depend to some extent on available equipment. Five years from now, it may be possible to shorten considerably the list of elementary particles.

We are here speaking according to a philosophy of science called "operational." This philosophy, much favored among scientists, holds that theory has significance only insofar as it organizes known experimental facts. Words have meaning only in the context of laboratory operations. The scientist refuses to judge the questions of ultimate reality.

To generate the enormous quantities of energy required to create matter under the Einsteinian equation, machines must be built at costs too great to be borne by a private institution or agency. For that matter, the amount of money involved is too large to be carried by the na-

tional budgets of any but a few wealthy nations.

Seventy miles east of Morningside Heights in New York, Columbia and eight other Eastern universities are associated with the Federal government in a project for building the largest such machine in the world, the Alternating Gradient Synchrotron, at Brookhaven National Laboratory on Long Island. When the A.G.S. is turned on late next year, it will race protons, fundamental particles of the nucleus, around a half-mile circular track in a structure that looks like a subway tunnel. If the 30-million-dollar machine operates as expected, it will accelerate the protons to energies as high as 30 billion electron volts. Each proton will have several million times as much energy as the high-energy electrons that hit the screen of a television tube. For a proton to achieve such energy, it is enough, by the Einstein equation, to increase its mass thirty-three times.

Associated Universities Inc., the organization that runs the Brookhaven laboratory for the government, consists of Columbia, Cornell, Harvard, Johns Hopkins, MIT, Princeton, the University of Pennsylvania, the University of Rochester and Yale. The Government pays Brookhaven's entire cost. As recently as a decade ago, it was still possible for a private university to pay a significant part of the price of a particle accelerator—Columbia's trustees put up \$550,000 for the construction of the great cyclotron at Nevis near Irvington, New York, in Westchester County; this machine, the largest in the world when built in 1949, cost \$2 million in all.

The Nevis cyclotron has a capacity of 400 million electron volts. Of course the energy developed in man-made devices is feeble when compared with what particles may gain when traveling the length of a galaxy. Physicists have detected cosmic-ray particles with energies millions and perhaps billions of times as great as could be generated in our largest accelerators. For this reason, the study of cosmic rays has been an important part of the inquiry into the fundamental physical nature of things. With the construction of bigger and better machines, however, it is becoming more practical to conduct experiments in energy and mass in the laboratory. The development of the particle accelerators has been one measure of the progress

of our knowledge of the atom's interior.

Only three fundamental particles—the electron, the proton and the photon of light—were known at the beginning of 1932, the year John Cockcroft and E. T. S. Walton invented the first accelerator—which generated 800,000 electron volts. Its successor, the Van de Graaff generator, pushed the figure over a million. Capabilities steadily increased with the invention of the cyclotron and a series of machines based on the cyclotron principle. Thus did knowledge of the atom, what it “was” and what it could do, increase.

When the neutron, a fourth particle, was discovered in 1932, it seemed possible to explain the nature of the atom in terms of the four units. For most of the facts known about the nucleus could be ascribed to protons and neutrons. The remaining structure might be attributed to electrons, oscillating in their “shells” about the nucleus. The emission and absorption of light photons accounted for the changes in the energy levels of the atom.

This anatomy, as far as it went, was the truth and nothing but the truth. But it was not the whole truth. In the years since 1932, a bewildering array of new particles has been identified—thirty, by now.

Many of the new particles are created when nuclei are bombarded by high-energy projectiles, either from cosmic rays or in machines—in the air above us or in such an accelerator as the Nevis cyclotron. With but a few exceptions, all the new particles are highly unstable: that is, within a millionth of a second or less, they decay into something else. Often the decay products are equally unstable. But eventually, in almost all cases, either a proton or an electron is produced. And in a few cases, to keep things lively, the decay chain will produce both.

The discovery and cataloguing of these new particles has been a major task of physicists in the last decade.

How are they catalogued? Their most important characteristics are mass, charge, spin and length of life.

The proton and neutron each have about the same mass—1,840 times as much as the electron. They are classified as nucleons, and their masses provide bench marks for classifying the rest, the

newer particles. Mesons are those with mass between that of the electron and the nucleon. Hyperons are those with mass greater than the nucleon.

Next, particles are classified by electrical charge—positive, negative or neutral. The proton is positive; the electron is negative; the neutron and photon are neutral. Impartial, the newer particles fall in all three groups.

The amount of spin is a third distinguishing characteristic. But in measuring spin, we move into the strange world of quantum mechanics. Classical physics and common experience tell us that an object can spin at any rate. As it accelerates, or slows down, we assume that a wheel passes through an unlimited number of intermediate speeds. Not so a nuclear particle. The quantum theory tells us that there is only one angular momentum, and thus only one speed, at which a given particle can spin and yet remain itself. The nuclear particle differs from the familiar spinning object also in that there are only a limited number of energy states possible for the particle. The macroscopic object, having an infinite number of possible rotational speeds, would have an infinite number of possible energy states.

When we classify particles with respect to length of life, we discover that only a few of those now known are stable. In this sense, these might be considered the truly fundamental particles. Depending, again, on how we define our terms, their number might be four or seven. The stable particles include the familiar proton, electron and photon, and one new one, the neutrino.

Perhaps this is the place for a clarifying digression: the names of nuclear particles have little organization or logic. As happens in languages, the words used by physicists have evolved for historical reasons, without any plan. The electron, about the turn of the twentieth century, was the first to be named. Thomson proved that electricity was atomic in nature—that it could be divided into indivisible bits—and so the bits were named electrons.

Twenty years later, Ernest Rutherford announced the existence of another elementary particle, a constituent of nuclei with positive charge, opposite to that of the electron, and of

a much greater mass. Rutherford said this particle is the fundamental constituent of matter. Using the Greek root *proto*, he gave it the name proton. It is increasingly evident that this name was well chosen. Protons are present in great abundance in all matter; they are the only stable form of the nuclear particles called nucleons; it is believed that the total of this type of nuclear particles in the universe never changes; essentially, they can be neither created nor destroyed.

The neutron and the positron were the next to be named; the derivation of their names was straightforward. The neutron was the first subatomic particle found to be electrically neutral. The positron, a small, positively charged particle, is the mirror image of the electron.

Enrico Fermi and Wolfgang Pauli suggested in 1932 that there is a tiny neutral particle, much smaller than the neutron. We might have said neutronlet. The Germans would have called it neutronchen. Fermi gave it a pretty Italian name—the neutrino ("little neutral one").

Rounding out the list named by the early 1930's was one involved in the oldest, established, permanent, floating controversy in science: is light made up of waves or particles? When it was finally decided, in the words of one skeptic to consider light as waves on Mondays, particles on Tuesdays and waves again on Wednesdays, it became necessary to give a name to the things when they were particles. Photon was the understandable choice.

Later, as the number of particles grew more rapidly, less thought was given to their naming. In the mid-1930's, Hideki Yukawa, an unknown young instructor at Osaka University in Japan, suggested the existence of what would then have been the middleweight among particles—heavier than the electron and lighter than the nucleons. This was named the meson. But confusion developed when several kinds of mesons were discovered, and so these were arbitrarily given Greek letter designations; the pi and mu mesons are the best known.

In more recent years, particles heavier than the nucleons have been discovered. These were distinguished first by their property of leaving a forked, or V-shaped, track on a photographic plate. They, in addition to some of the mesons, were first called V-particles. Later, the heavy particles were also given Greek letter names:

lambda, sigma and xi. Now the entire group is called the hyperons.

Returning to the question of how many stable particles there are, the issue is whether particles and their antiparticles should be listed separately or together. For example, the positron is the antiparticle of the electron; the antiproton is the antiparticle of the proton. These antiparticles are stable. If we add them to the list of stable particles, the total is seven.

What are antiparticles? The following account is often given to describe the distinction between particles and antiparticles—a distinction which lies at the root of the recent publicity about antimatter: Particles exist in two states of energy, positive and negative. Negative-energy particles have negative mass and momentum directed opposite from velocity. (This is just a mathematical statement without any meaning in the context of ordinary existence. Don't try to visualize it.) Empty space actually is a uniform sea of particles of negative energy, mass and momentum. Occasionally, however, a hole appears in this sea of negative-energy particles. The hole is exactly the size of one particle.

The hole is characterized by the absence of negative mass. Since the absence of negation is equivalent to affirmation, the space acts just as though it possessed positive mass. Similarly, it seems to have positive momentum and energy. When an ordinary particle encounters such a space, it may "fall through" to a negative energy state.

If we are discussing electrons, the "hole in space" manifests itself as a positron. When an ordinary electron falls through the hole, both electron and positron disappear. But waves of X-ray energy are released as the result of the precipitous fall, just as a falling object sets sound waves in motion when it strikes the earth.

It is assumed that antimatter could be formed by building up antinuclei of antiprotons and antineutrons. Positrons could then be arranged in orbits about the antinuclei to make antiatoms. So far, no one has been able to do this because, as a rule, antiparticles are annihilated almost immediately after they are produced, upon encountering ordinary particles.

NAME	MASS (number of times greater than the electron)	DECAY PRODUCTS
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THE MESONS

Pi meson (+ or -)	273	$\mu^\pm + \nu$
(°neutral)	264	$\gamma + \gamma$
Mu meson (+ or -)	206	$e^\pm + \nu + \bar{\nu}$
K meson (+ or -)	967	$\mu^\pm + \nu$
		$\pi^\pm + \pi^0$
		$\pi^\pm + \pi^\mp + \pi^\pm$
		$\pi^\pm + \pi^0 + \pi^0$
		$e^\pm + \nu + \pi^0$
(°neutral)	975	$\mu^\pm + \nu + \pi^0$
		$\pi + \pi^-$

THE HYPERONS

Lambda Particle (°neutral)	2,182	$p + \pi^-$ $n + \pi^0$
Sigma Particle (°neutral)	2,326	$\Lambda^0 + \gamma$
	(+)	$p + \pi^0$ $n + \pi^+$
	(-)	$n + \pi^-$
Xi Particle (-)	2,585	$\Lambda^0 + \pi^-$
	(°neutral)	$\Lambda^0 + \pi^0$

SYMBOLS

p	=	proton
n	=	neutron
e	=	electron
ν	=	neutrino
$\bar{\nu}$	=	antineutrino
γ	=	photon
π	=	pi meson
μ	=	mu meson
Λ	=	lambda particle

Here is a list of some, not all, of the most recently discovered particles, together with their masses relative to the mass of the electron and their principal modes of decay. Depending upon the charge of the original particle—positive, negative or neutral (the pi mesons, for example, may be any of the three)—the charge of the resulting particles may change. Thus, a positive pi meson may decay into a positive mu meson and the always-neutral neutrino. A negative pi meson may decay into a negative mu meson and a neutrino.

Another interesting, if amazing, speculation about antimatter is that it may have antigravity; that is, it may be repelled, rather than attracted, by the gravitational fields of ordinary matter. As yet, no one has reported an experiment testing this notion, and calculations indicate it to be an unlikely one.

To our list of stable particles we could, for most purposes, add the neutron and antineutron. When bound into a nucleus of ordinary, stable matter, the neutron is stable. Outside the nucleus, the neutron has an average life of about seventeen minutes. This is an eon compared with the lives of the newer particles, all of which are quite unstable.

Almost all of the remaining particles decay as the result of what is called "weak interaction." The weakness isn't in the force holding the particle together, but in the force pulling it apart. The physicist calls the force weak because decay takes place so slowly. It may require as much as a billionth or even a millionth of a second.

This is practically creeping in comparison with another class of interactions, which even the physicist would say take place rapidly. These latter are the strong interactions resulting from the forces that bind the nucleus together. These can normally produce a corresponding decay in that fraction of a second described by a decimal point followed by 22 zeroes and a 1. (This is the time it takes light to travel the diameter of the nucleus.)

The physical forces of the universe have now been separated by scientists into four major classifications. The most powerful known to man are these strong nuclear binding forces. Next in order are the electromagnetic forces, responsible for chemical, electrical, magnetic and much of radiation energy. The weak interactions rank third. They are extremely strong when compared with gravity, the fourth great group. A weak-interaction force is 10^{25} (1 with 25 zeroes after it) times as strong as that of gravity. (If it surprises you that gravity is so weak, consider the fact that it is exceedingly difficult to detect the gravitational attraction of an object as large as a mountain. Only things whose mass is comparable with that of the earth exert sufficient gravitational force to produce effects easy to

observe.)

For reasons that no one has yet been able to discern, the weak interactions do not follow some of the rules that seem essential to the other three classifications of physical force.

One of these rules is the conservation of parity, which states that Nature shows no preference between right and left. One might take a spinning cylinder and break it into two unequal pieces by throwing it against a stone wall. If the spin is in the same direction each time we do this—say clockwise when viewed from a given position—conservation of parity tells us that, when the pieces are unequal, there is no reason to expect that the fragment from the near end would more likely be the bigger piece. Or the smaller piece.

The parity rule holds in ordinary experience, where electromagnetic and gravitational forces obtain. If we were able to perform the cylinder experiment many times under perfect conditions, we could demonstrate it. By perfect conditions, I mean that extraneous effects such as wind, temperature, air pressure and so forth are held constant or that their variation is kept so slight that they will not significantly affect the results. Under such conditions, we should expect that the fragment from the near end of the cylinder would be the larger piece half of the time and the smaller piece half of the time. Similarly, it might be possible to demonstrate this parity rule for strong nuclear interactions.

Since parity conservation seemed to hold for most physical forces, it was assumed to hold for the weak interactions. However, about four years ago, a puzzle developed about K mesons, a group of elementary particles with mass about 970 times that of electrons. The K mesons have several modes of decay. In some, three pi mesons are produced. In others, two pi mesons result. If energy, momentum, spin, charge, parity and other essential characteristics were conserved according to the then accepted laws of physics, calculations showed that there had to be two types of K meson: one that decays to two pions and one that decays to three.

For a while, physicists toyed with this idea. But then Dr. Tsung Dao Lee of Columbia and Dr. Chen Ning Yang of the Institute for Advanced Study made the suggestion that won them last year's Nobel Prize: conservation of

parity does *not* hold for the weak interactions. Lee and Yang pointed out that parity conservation had never been tested for this class of forces. They proposed an experiment, which was performed by Dr. Chien-Shiung Wu of Columbia and a group of her colleagues at the National Bureau of Standards.

In the experiment, radioactive cobalt atoms were cooled almost to absolute zero, reducing their random motion as much as possible. Then, by applying a magnetic field, the experimenters lined up the atoms so that almost all of their nuclei were spinning in the same direction. In technical terms, the nuclei were polarized. Then the experimenters measured the distribution of electrons produced by the decay of a neutron within the cobalt nucleus—one form of weak interaction. The experiment demonstrated that the distribution was not uniform. To visualize the situation, hold your right hand as though gripping a cylindrical object, with the four fingers curved around the cylinder and the thumb extended along the length of the cylinder. It is clear that if you grasp the cylinder with the left hand, the thumb will be pointed in the opposite direction in its relation to the fingers. Let us imagine that in the cobalt experiment all the nuclei were spinning in the direction the fingers are pointing. The results showed that there was a marked difference in electron emission between the directions of the right thumb and the left thumb. The electrons are segregated to some extent on one side of a plane perpendicular to the line of the thumbs. In such a case, obviously, nature does distinguish between right and left.

Another rule that seems to fail in weak interactions is the symmetry between matter and antimatter. This principle states that, if we could somehow replace every particle on earth with its antiparticle—thus creating a sort of antiearth—no one would be able to tell the difference. Corresponding physical and chemical reactions would still occur. The experiments have been involved and the reasoning complex. There seems to be a clear inference, however, that this interchangeability simply does not obtain in the weak interactions.

For many years, there seemed to be a chance that an even more basic law of physics, the conservation of energy, might not hold for some of the weak interactions. In the nineteenth cen-

tury, there were two laws covering this matter, the conservation of energy and the conservation of mass. One stated that energy could be neither created nor destroyed; the other said the same for mass. Now that we know mass and energy are the same, the single law states that while mass and energy can be transformed back and forth, the total of both remains constant.

Difficulty arose in connection with what might be called the losing game of beta decay. This is the emission of electrons by some unstable particles and nuclei, one form of weak interaction. The cobalt experiment performed by Dr. Wu and her colleagues was an example of beta decay.

In a radioactive—that is, unstable—nucleus, a neutron may break up into a proton and an electron. The proton remains in the nucleus; the electron is emitted. This process was observed first by Rutherford around the turn of the century. When techniques for measuring nuclear masses were developed, it was determined that, as expected, the product nucleus was lighter than the original nucleus. Part of the difference represented the mass the departed electron would have when at rest; another part represented the kinetic energy—that is, the energy associated with motion—of the electron and the recoiled nucleus. Similar measurements were made of the momentum of the original nucleus, the product nucleus and the departed electron.

Here was the problem: the mass of the electron and the energy created did not account for *all* of the mass lost by the nucleus; the momentum of the electron did not account for *all* of the momentum lost by the nucleus.

Besides the apparent breakdown of energy and momentum conservation in beta decay, a third disparity turned up. The total amount of spin was not conserved. The products did not have as much angular momentum as the original particles.

The experiment was performed again and again in hope of uncovering some error in technique. None was found. Later, the same short-changing was found in all beta decay processes. And when the new, unstable particles were discovered, the same discrepancies were found regularly whenever electrons were produced.

How could the conflicts with existing laws be reconciled? One way, of course, would have been to scrap the conservation laws for energy,

momentum and spin. Another solution was proposed by Pauli and Fermi in 1932. They suggested that the surpluses were carried away by a tiny, unknown neutral particle whose interaction with other particles was so small as to be almost undetectable. Fermi named this furtive particle the neutrino, as we said.

It was a fine solution, but some physicists objected that it had a rather *ad hoc* nature. The neutrino was postulated as something almost impossible to observe. Theoretical calculations indicated that a neutrino could pass many millions of times through the solid earth before demonstrating its existence by interacting with even one atom of matter. To a neutrino, solid matter would be almost indistinguishable from a perfect vacuum. It was as though the suggestion had been made, "Something is carrying away the excess energy, momentum, and spin, but it is something you will probably never be able to detect, a sort of poltergeist."

And so final judgment on the neutrino hypothesis remained suspended for more than twenty years, although the circumstantial evidence for its existence grew stronger and stronger. Finally, in 1956, experimental technique improved to the point where neutrinos could be detected. They were, and the matter was settled.

Another classic hypothesis that remained on probation for a long time was that put forth by Yukawa in 1936, having to do with the very source of the force that holds the nucleus together. He published calculations indicating that the energy in a particle with mass about 200 times that of the electron is responsible for this strong interaction that overcomes the mutual repulsion of the positively charged protons.

Great was the excitement among physicists a few years later when the mu meson, a particle with mass 206 times that of the electron, was detected in cosmic rays. Great was the anticlimax when experiments proved conclusively that the mu meson does not interact strongly with nuclei.

The problem was finally cleared up with the discovery of another particle, the one Yukawa had predicted, with mass 273 times that of the electron. This particle, the pi meson, does interact strongly with nuclei.

In describing the pi meson, we approach the

end of this general explanation of particles. Last, the pi meson is far from the least of these in importance.

How does the pi meson interact with nuclei? Let us compare the nuclear forces with a better-understood class of forces. One way the electromagnetic forces show themselves is by the emission and absorption of photons of electromagnetic radiation, more commonly called light. Electrons in an atom oscillate about the nucleus only at certain levels—in specified orbits. When an electron absorbs a photon of light with just the right amount of energy, it jumps to a higher orbit. When it falls to a lower orbit, a photon—also called a quantum—is emitted. This is the quantum theory of the electron.

(The light emitted or absorbed need not be visible, of course. Electromagnetic radiation varies from very long-wave, low-energy radio waves to high-frequency, high-energy, short-wave X-rays. Visible light is an octave at about the middle of this spectrum.)

On the other hand, the nuclear force manifests itself by the emission and absorption of pi mesons, rather than photons. Both protons and neutrons exert nuclear force in the same way; for the purpose of discussing nuclear force, they are both called nucleons. Current theory pictures the nucleon as a relatively small particle with a large cloud of pi mesons around it. The mesons act as the glue that holds a nucleus together. Thus we can see that the pi meson has a place of special importance in the scheme of elementary particles. There is further evidence of this in the fact that, in all the unstable particles, there are only two decay reactions that do not involve pi mesons. In addition to carrying the nuclear force, the pi is apparently also some sort of basic quantum involved in the building of the other unstable particles.

Pi mesons may be produced outside the nucleus by a high-energy proton-proton collision. If a proton hits another with sufficient energy, this energy can be converted to mass, yielding one pi meson. How are such experiments performed? We can wait for Nature to do them—observing cosmic rays. Or with such machines as the Nevis cyclotron and the Cosmotron at Brookhaven National Laboratory, men can perform the experiments themselves.

With a few exceptions, it now seems possible

to manufacture any particle from almost any other particle—by adding the right amount of energy and satisfying the other conservation laws. It is reasonable to speculate that after the 30-billion-volt machine goes into operation at Brookhaven next year it may be possible to manufacture even heavier particles than the Ximinus, the most massive now known.

For it may be possible to look at the hyperons as excited states of the proton—just as the electron's different orbits about the nucleus represent different levels of energy, or excitation, of the electron. Each of the presently known hyperons decays by one or more stages until a proton remains. They emit pi mesons in all but one instance, just as an excited electron emits photons as it decays to a stable orbit about the nucleus.

Why should it not be possible to produce more massive particles when we build machines capa-

ble of producing more energy?

It is here, with a question, that we must end this account of the particles of physics. It is not a logical place to conclude a story. Many questions remain unanswered. Unfortunately, the answers are not known. With equipment put aboard balloons, rockets and satellites, and in the great particle-accelerators, physicists are laboriously accumulating information. Others are sorting and cataloguing the facts. A few patterns are emerging.

But the world of physics still waits for a theory that will organize what is known about the elementary particles. Physicists must have a theory that will predict such properties as mass, charge, spin and expected lifetime. They are confident that, in time, such a theory will be produced. Nature, a seemingly capricious lady, has shown in the past that, if we study her carefully, we can find consistency in her conduct.

The Consolations of Theology

by ERIC BENTLEY

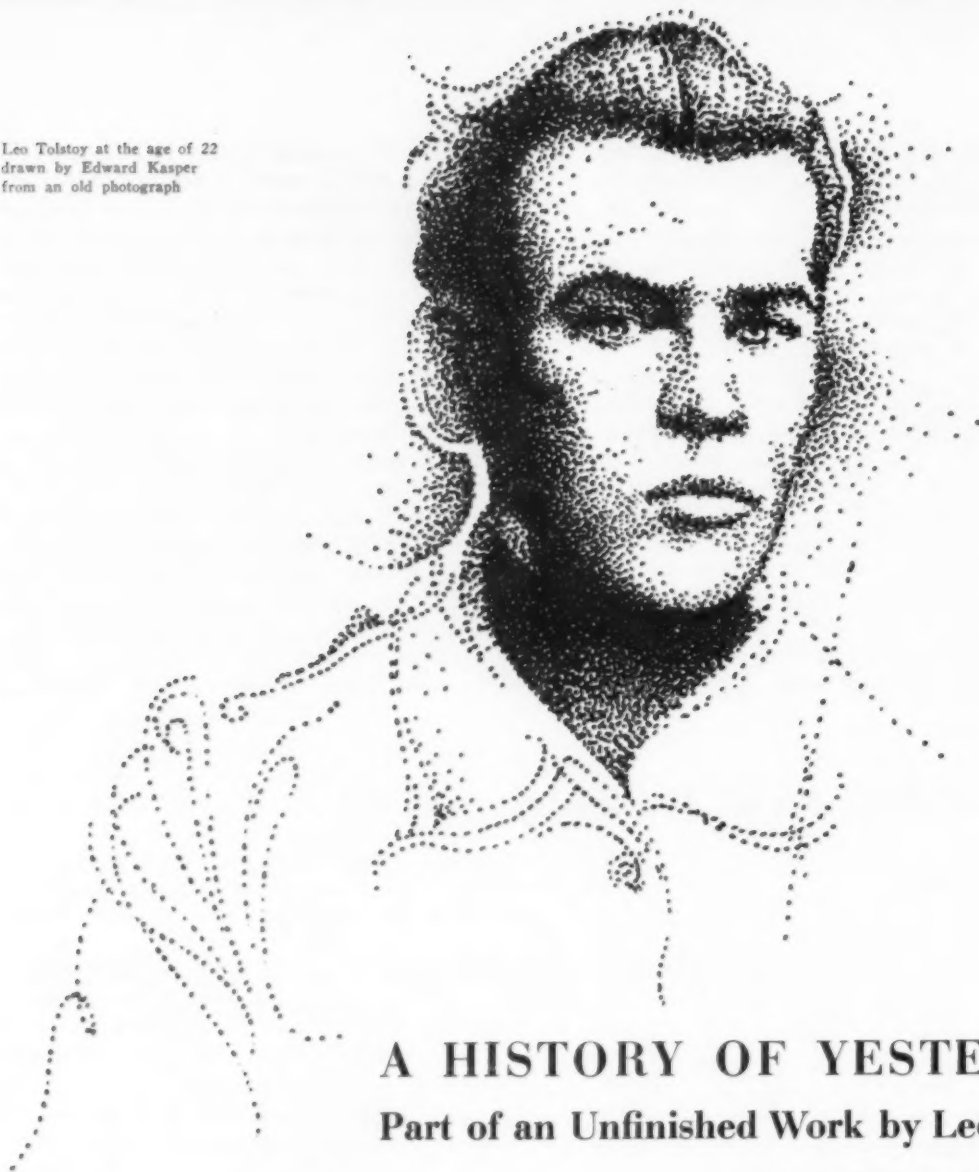
*"Man is maladjusted to the universe"—Paul Tillich
as quoted by TIME*

At first blush (yes) the ways of God
Are less than wondrous: they are odd.
But happily theology
Supplies some truths that make us free.
Here's one: things are not what they seem.
Life (more precisely) is a dream.
What may look bad to human eyes
Is really good (in slight disguise).
It's wrong to call the Lord a duffer
Because He (sometimes) makes us suffer.
Here's the conclusion that applies:
We suffer, therefore He is wise.

Brander Matthews professor of dramatic literature at Columbia, Eric Bentley is best known as the author of THE PLAYWRIGHT AS THINKER, IN SEARCH OF THEATRE, THE DRAMATIC EVENT, and WHAT IS THEATRE? He holds degrees from Oxford and Yale.

We suffer more? Then wiser, He.
(This inverse ratio lets us see
What irked us once in Him Above
As but a function of His love.)
This is not logical: His Word
Is credible because absurd.
And just because this makes no sense
It typifies an *Existenz*
That less resembles fact than story.
Absurdity is God's own glory—
And though (by all means) you may doubt it
There's nothing you can do about it.
To those of you who have a plan
For lightening the lot of man
He sends (by me) this holy warning:
PLEASE STOP IT BY TOMORROW MORNING.
ADJUSTING THINGS WILL MAKE THEM WORSE:
FOR MAN IS MALADJUSTED TO THE UNIVERSE.

Leo Tolstoy at the age of 22
drawn by Edward Kasper
from an old photograph



A HISTORY OF YESTERDAY

Part of an Unfinished Work by Leo Tolstoy

Translated by **GEORGE L. KLINE**

I am writing a history of yesterday not because yesterday was extraordinary in any way, for it might rather be called ordinary, but because I have long wished to trace the intimate side of life through an entire day. Only God knows how many diverse and divert-

ing impressions, together with the thoughts awakened by them, occur in a single day. Obscure and confused they may be, but they are nevertheless comprehensible to our minds. If they could be recorded in such a way that I myself—and others after me—could easily read the account, the result would be a most instructive and amusing book. But there would not be ink enough in the world to write it, or typesetters to put it into print. However, let us get on with the story.

I arose late yesterday—at a quarter to ten—

Assistant professor of philosophy at Columbia, George L. Kline holds three degrees from the University. The Winter 1959 FORUM carried his translations of three poems by Boris Pasternak. He is currently at work on a book entitled RUSSIAN ETHICAL AND SOCIAL THEORY.

because I had gone to bed after midnight. (It has long been my rule never to retire after midnight, yet this happens to me at least three times a week.) But there are some circumstances in which I consider this a fault rather than a crime. The circumstances vary; yesterday they were as follows:

Here I must apologize for going back to the day before yesterday. But then, novelists devote whole chapters to their heroes' forebears.

I was playing cards—not from any passion for the game, as it might seem; no more, indeed, from a passion for the game than one who dances the polka does so from a passion for promenading. Rousseau, among the many things which he proposed and no one has accepted, suggested the playing of cup-and-ball in society in order to keep the hands occupied. But that is scarcely enough; in society the head too should be occupied or at the very least should be so employed as to permit silence as well as conversation.¹ Such an employment has been invented: cards. People of the older generation complain that “nowadays there is no conversation.” I don’t know how people were in the old days (it seems to me that people have always been the same), but conversation there can never be. As an employment conversation is the stupidest of inventions.—It is not from any deficiency of intelligence but from egotism that conversation fails. Everyone wishes to talk about himself or about that which interests him. But if one person speaks while another listens, you have not a conversation but a lecture. If two people come together who are interested in the same thing, then a third person is enough to spoil the whole business: he interferes, you must try to give him a share too—and your conversation has gone to the devil.

There are also conversations between people who are interested in the same thing, and where no one disturbs them, but such cases are even worse. Each speaks of the same thing from his own viewpoint, transposing everything to his

¹ In fact, Rousseau too was concerned with occupying the head as well as the hands. “If ever I went back into society,” he wrote in Book V of the *Confessions*, “I should carry a cup-and-ball in my pocket, and play with it all day long to excuse myself from speaking when I had nothing to say. If everyone were to do the same men would become less malicious, and society would become . . . more agreeable.”—G.L.K.

Tolstoy planned “A History of Yesterday” as a major literary effort—his first. He wrote the surviving fragment between March 26 and 28, 1851 (old style calendar), set the work aside while he completed *Childhood*, and never returned to it. The fragment was not published until after his death; it was not translated into English until 1949.

The “yesterday” in question was March 25, but the story begins with the evening of the “day before yesterday” and gets little beyond it. Tolstoy actually spent that evening (March 24) in the home of his second cousin, Prince A. A. Volkonski, whose charming and flirtatious 26-year-old wife seems to have been almost hypnotically attractive to the 22-year-old Tolstoy. (She later served as the model for the “Little Princess,” wife of Prince Andrei Bolkonski, in *War and Peace*.) Tolstoy recalled in 1852 that his “best memories” of the preceding year were of her.

At this time Tolstoy was devouring Goethe’s *Werther* and Sterne’s *Sentimental Journey through France and Italy*. He admired the latter so much that he actually completed a Russian translation (based largely on a French one) of about a third of it. “A History of Yesterday” shows the influence of Sterne in many ways: in its innocent and “sentimental” eroticism, in the close analysis of subtle and evanescent feelings and reactions to feelings, in the “inaudible conversation,” the frequent digressions—and digressions within digressions—and in the intrusion of commonplace aphorisms and observations. There is even direct borrowing, as when Sterne writes: “I [was] left alone with the lady with her hand in mine, and with our faces both turned closer to the door . . . than what was absolutely necessary,” and Tolstoy echoes: “She very carefully drew something which I could not see, lifted the chalk a little higher than was necessary, and placed it on the table.”

Certain literary devices appear in this early work which Tolstoy later abandoned. Others—particularly the interior monologue, the “silent dialogue,” and the suggestion of emotional states and processes through facial expression or bodily movement—were systematically developed in later works.

This English version is based upon the authoritative text of the Jubilee Edition of Tolstoy’s collected works (“*Istoriya vcherashnevo dnya*,” *Polnoye sobraniye sochinenii* L. N. Tolstovo, I, Moscow, 1928), edited by Tolstoy’s long-time associate V. G. Chertkov. What follows is a slightly abridged revision of my earlier translation, which appeared in the *Russian Review*, Vol. VIII, No. 2 (1949).
G.L.K.

own key, and measuring everything with his own yardstick. The longer the conversation continues, the further apart they draw, until at last each one sees that he is no longer conversing, but is preaching with a freedom which he permits only to himself; that he is making a spectacle of himself, and that the other is not listening to him, but is doing the same thing. Have you ever rolled eggs during Holy Week? You start off two identical eggs with the same stick, but with their little ends on opposite sides. At first they roll in the same direction, but then each one begins to roll away in the direction of its little end. In conversation, as in egg-rolling, there are little sloops that roll along noisily and not very far; there are sharp-ended ones that wander off heaven knows where. But, with the exception of the little sloops, there are no two eggs that will roll in the same direction. Each has its little end.

I am not speaking now of those conversations which are carried on simply because it would be improper not to say something, just as it would be improper to appear without a necktie. One person thinks, "You know quite well that I have no real interest in what I am saying, but it is necessary"; and the other, "Talk away, talk away, poor soul—I know it is necessary." This is not conversation, but the same thing as a swallowtail coat, a calling card, and gloves—a matter of decorum.

And that is why I say that cards are an excellent invention. In the course of the game one may chat, gratify one's ego, and make witty remarks; furthermore, one is not obliged to keep to the same subject, as one is in that society where there is only conversation.

One must reserve the last intellectual cartridge for the final round, when one is taking his leave. Then is the time to explode your whole supply, like a race horse approaching the finish line. Otherwise one appears pale and insipid. And I have noticed that people who are not only clever but capable of sparkling in society have lost out in the end because they lacked this sense of timing. If you have spoken heatedly and then become too bored and listless to reply, the last impression lingers, and people say, "How dull he is . . ." But when people play cards this does not happen. One may remain silent without incurring censure.

Besides, women—young ones—play cards, and

what could be better than to sit beside a young lady for two or three hours? And if it is *the* young lady, nothing more can be desired.

And so I played cards. We took seats on the right, on the left, opposite—and everything was cozy.

This diversion continued until a quarter to twelve. We finished three rubbers. Why does this woman love (how I should like to finish this sentence with "me"!) to embarrass me?—For even if she didn't I would not be myself in her presence. It seems to me either that my hands are very dirty or that I am sitting awkwardly, or else I am tormented by a pimple on my cheek—the one facing her. Yet she is in no way to blame for this: I am always ill at ease with people whom I either do not like or like very much. Why is this? Because I wish to convey to the former that I do not like them, and to the latter that I do, and to convey what you wish is very difficult. With me it always works out in reverse. I wish to be cool, but then this coolness seems overdone and to make up for it I become too affable. With people whom you love honorably, the thought that they may think you love them dishonorably unnerves you and you become short and brusque.

She is the woman for me because she has all those endearing qualities which compel one to love them, or rather, to love her—for I do love her. But not in order to possess her. That thought never entered my head.

She has the bad habit of billing and cooing with her husband in front of others, but this does not bother me; it means no more to me than if she should kiss the stove or the table. She plays with her husband as a swallow plays with a blossom, because she is warmhearted and this makes her happy.

She is a coquette; no, not a coquette, but she loves to please, even to turn heads. I won't say coquette, because either the word or the idea associated with it is bad. To call showing the naked body and deceiving in love coquetry!—That is not coquetry but brazen impudence and baseness. But to wish to please and to turn heads is fine and does no one any harm, since there are no Werthers; and it provides innocent pleasure for oneself and others. Thus, for example, I am quite content that she should please me; I desire nothing more. Furthermore, there is clever coquetry and stupid coquetry; clever coquetry is

inconspicuous and you do not catch the culprit in the act; stupid coquetry, on the contrary hides nothing. It speaks thus: "I am not so good-looking, but what legs I have! Look! Do you see? What do you say? Nice?"—Perhaps your legs are nice, but I did not notice, because you showed them.—Clever coquetry says: "It is all the same to me whether you look or not. I was hot, so I took off my hat." I saw everything. "And what does it matter to me?" *Her* coquetry is both innocent and clever.

I looked at my watch and got up. It is astonishing: except when I am speaking to her, I never see her looking at me, and yet she sees all my movements.—"Oh, what a pink watch he has!" I am very much offended when people find my Bréguet watch pink; it would be equally offensive if they told me that my vest is pink. I suppose I was visibly embarrassed, because when I said that on the contrary it was an excellent watch, she became embarrassed in her turn. I dare say she was sorry that she had said something which put me in an awkward position. We both sensed the humor of the situation, and smiled. Being embarrassed together and smiling together was very pleasant to me. A silly thing, to be sure, but together.—I love these secret, inexplicable relationships, expressed by an imperceptible smile or by the eyes. It is not only that one person understands the other, but that each understands that the other understands that he understands him, etc.

Whether she wished to end this conversation which I found so sweet, or to see how I would refuse, or if I would refuse, or whether she simply wished to continue playing, she looked at the figures which were written on the table, drew the chalk over the table—making a figure that could be classified neither as mathematical nor pictorial—looked at her husband, then between him and me, and said: "Let's play three more rubbers." I was so absorbed in the contemplation not of her movements alone, but of everything that is called *charme*—which it is impossible to describe—that my imagination was very far away, and I did not have time to clothe my words in a felicitous form. I simply said: "No, I can't."

Before I had finished saying this I began to regret it—that is, not all of me, but one part of me. There is no action which is not condemned by some part of the mind. On the other hand,

there is a part that speaks in behalf of any action: what is so bad about going to bed after twelve, and when do you suppose you will spend another such delightful evening?—I dare say this part spoke very eloquently and persuasively (although I cannot convey what it said), for I became alarmed and began to cast about for arguments.—In the first place, I said to myself, there is no great pleasure in it, you do not like her at all, and you're in an awkward position; besides, you've already said that you can't stay, and you would fall in her estimation . . .

"Comme il est aimable, ce jeune homme."

This sentence, which followed immediately after mine, interrupted my reflections.—I began to make excuses, to say I couldn't stay, but since one does not have to think to make excuses, I continued reasoning with myself. How I love to have her speak of me in the third person. In German this is rude, but I would love it even in German. Why doesn't she find a decent name for me? It is clearly awkward for her to call me either by my given name or by my surname and title. Can this be because I . . .

"Stay and have supper," said her husband.—As I was busy with my reflections on the formula of the third person, I did not notice that my body, while very properly making its excuses that it could not stay, was putting down its hat again and sitting down quite coolly in an easy chair. It was clear that my mind was taking no part in this absurdity. I became highly vexed and was about to begin roundly reproaching myself, when a pleasant circumstance diverted me. She very carefully drew something which I could not see, lifted the chalk a little higher than was necessary, and placed it on the table. Then she put her hands on the divan on which she was sitting, and wriggling from side to side, pushed herself to the back of it and raised her head—her little head, with the fine rounded contours of her face, the dark, half-closed, but energetic eyes, the narrow, sharp little nose and the mouth that was one with the eyes and always expressed something new. At this moment who could say what it expressed? There was pensiveness and mockery, and pain, and a desire to keep from laughing, dignity, and capriciousness, and intelligence, and stupidity, and passion, and apathy, and much more. After waiting for a moment, her husband went out—I suppose to order the

supper.

To be left alone with her is always frightening and oppressive to me. As I follow with my eyes whoever is leaving, it is as painful to me as the fifth figure of the quadrille: I see my partner going over to the other side and I must remain alone. I am sure it was not so painful for Napoleon to see the Saxons crossing over to the enemy at Waterloo as it was for me, a young man, to watch this cruel maneuver. The strategem that I employ in the quadrille I employed also in this case: I acted as though I did not notice that I was alone. And now even the conversation which I had begun before his exit came to an end; I repeated the last words that I had said, adding only, "And that's how it is." She repeated hers, adding, "Yes." But at the same time another, inaudible, conversation began.

She: "I know why you repeat what you have already said. It is awkward for you to be alone and you see that it is awkward for me—so in order to seem occupied you begin to talk. I thank you very much for this attention, but perhaps one could say something a little bit more intelligent."

I: "That is true, your observation is correct, but I don't know why *you* feel awkward. Surely you don't think that when we are alone I will begin to say things that will be distasteful to you? To prove that I am ready to sacrifice my own pleasures for your sake, however agreeable our present conversation is to me, I am going to speak aloud. Or else you begin."

She: "Well, go on!"

I was just opening my mouth to say something that would allow me to think of one thing while saying something else, when she began a conversation aloud which apparently could continue for a long while. In such a situation the most interesting questions are neglected because the conversation continues. Having uttered one sentence apiece, we fell silent, tried once more to speak, and again fell silent.

The conversation—I: "No, it is impossible to talk. Since I see that this is awkward for you, it would be better if your husband were to return."

She: (Aloud to a servant) "Well, where is Ivan Ivanovich? Ask him to come in here." If anyone does not believe that there are such secret conversations, that should convince him.

"I am very glad that we are now alone," I continued, speaking silently, "I have already mentioned to you that you often offend me by your lack of confidence. If my foot accidentally touches yours, you immediately hasten to apologize and do not give me time to do so, while I, having realized that it was actually your foot, was just about to apologize myself. Because I am slower than you, you think me indelicate."

Her husband came in. We sat for a while, had supper, and chatted. At about twelve-thirty I went home.

It was spring, the twenty-fifth of March. The night was clear and still; a young moon was visible from behind the red roof of a large white house opposite; most of the snow was already gone.

My night sledge was the only vehicle at the entrance; even without the footman's shout of "Let's go, there!" Dmitri knew quite well that it was I who was leaving. A smacking sound was audible, as though he were kissing someone in the dark, which, I conjectured, was intended to urge the little mare and the sledge away from the pavement stones on which the runners grated and screeched unpleasantly. Finally the sledge drew up. The solicitous footman took me under the elbow and assisted me to my seat. If he had not held me I should simply have jumped into the sledge, but as it was, in order not to offend him, I walked slowly, and broke through the thin ice which covered the puddle—getting my feet wet. "Thank you, my friend"—"Dmitri, is there a frost?"—"Of course, sir; we still have a bit of frost at night."

—How stupid! Why did I ask that?—No, there is nothing stupid about it. You wanted to talk, to enter into communication with someone, because you are in high spirits. And why am I in high spirits? Half an hour ago if I had gotten into my sledge, I wouldn't have started to talk.—Because you spoke elegantly when taking your leave, because her husband saw you to the door and said, "When will we see you again?"—Because as soon as the footman caught sight of you he jumped up, and despite the fact that he reeked of parsley, he took pleasure in serving you.—I gave him a fifty-kopek piece a few days ago.—In all our recollections the middle falls away and the first and last impressions remain,

especially the last. For this reason there exists the splendid custom of the master of the house accompanying his guest to the door, where, twining one leg about the other as a rule, the host must say something kind to his guest. Despite any intimacy of relations, this rule must not be disregarded. Thus, for example, "When will we see you again?" means nothing, but from vanity the guest involuntarily translates it as follows: *When* means, "please make it soon"; *we* means, "not only myself but my wife, who is also pleased to see you"; *see you* means, "give us the pleasure another time"; *again* means, "we have just spent the evening together, but with you it is impossible to be bored." And the guest carries away a pleasant impression.

It is also necessary to give money to the servants, especially in homes that are not well regulated and where not all the footmen are courteous—in particular the doorman (who is the most important personage because of the first and last impression). They will greet you and see you off as if you were a member of the family, and you translate their solicitousness—whose source is your fifty-kopek piece—as follows: "Everyone here loves and respects you, therefore we try, in pleasing the masters, to please you." Perhaps it is only the footman who loves and respects you, but all the same it is pleasant. What's the harm if you are mistaken? If there were no mistakes, there would be no . . .

"Are you crazy! . . . What the de-e-evil!"

Dmitri and I were very quietly and modestly driving down one of the boulevards, keeping to the ice on the right-hand side, when suddenly some "chowderhead" (Dmitri gave him this name afterwards) in a carriage and pair ran into us. We separated, and only after we had gone on about ten paces did Dmitri say, "Look at him, the chowderhead, he doesn't know his right hand from his left!"

Don't think that Dmitri was a timid man or slow to answer. No, on the contrary, although he was of small stature, clean shaven—but with a moustache—he was deeply conscious of his own dignity and strictly fulfilled his duties. His weakness in this case was attributable to two circumstances: 1) Dmitri was accustomed to driving vehicles which inspired respect, but now we were driving in a small sledge with very long shafts, pulled by a very small horse, which he

could hardly reach even with a whip; what is more, the horse dragged its hind feet pitifully—and all this could easily evoke the derision of bystanders. Consequently this circumstance was all the more difficult for Dmitri and could quite destroy his feelings of [self-confidence].² 2) Probably my question, "Is there a frost?" had reminded him of similar questions that I had asked him in the autumn on starting out to hunt. He is a hunter, and hunters have something to daydream about; they forget to hurl a well-timed curse at the driver who does not keep to the right-hand side. With coachmen, as with everyone else, whoever shouts first and with the greatest assurance is right. There are certain exceptions. For example, a droshki-driver cannot shout at a carriage; a singleton—even an elegant one—can hardly shout at a four-in-hand; but then, everything depends on the nature of the individual circumstances, and, most important, on the personality of the driver and the direction in which he is going. I once saw in Tula a striking example of the influence that one man can have on others through sheer audacity.

Everyone was driving to the carnival: sleighs with pairs, four-in-hands, carriages, trotters, silk cloaks—all drawn out in a line on Kiev Street—and there were swarms of pedestrians. Suddenly there was a shout from a side street: "Hold back your horses! Out of the way there!" in a self-assured voice. Involuntarily the pedestrians made way, the pairs and four-in-hands were reined in. And what do you think? A ragged cabby, brandishing the ends of the reins over his head, standing on a broken-down sledge drawn by a vile jade, tore through with a shout to the other side, before anyone realized what was happening. Even the policemen burst out laughing.

Although Dmitri is a reckless fellow and loves to swear, he has a kind heart and spares his poor horse. He uses the whip not as an incentive but as a corrective, that is, he doesn't spur his horse on with the whip: this is incompatible with the dignity of a city driver. But if the trotter doesn't stand still at the entrance, he will "give him one." I had occasion to observe this presently: crossing from one street to another our little horse was hardly able to drag us along, and I noticed from the desperate move-

² This word is illegible in Tolstoy's manuscript.—G.L.K.

ments of Dmitri's back and hands and from his clucking that he was having difficulties. Would he use the whip? That was not his custom. But what if the horse stopped? That he would not tolerate, even though here he didn't need to fear the wag who would say, "Feeding time, eh?" . . . Here was proof that Dmitri acted more from a consciousness of his duty than from vanity.

I thought much more about the many and varied relations of drivers among themselves, of their intelligence, resourcefulness, and pride. I suppose that at large gatherings those who have been involved in collisions recognize one another and pass from hostility to peaceable relations. Everything in the world is interesting, especially the relationships which exist in classes other than our own.

If the vehicles are going in the same direction the disputes last longer. The one who was to blame attempts to drive the other way or to leave him behind, and the latter sometimes succeeds in proving to him the wrongness of his action, and gains the upper hand; however, when they are driving on the same side the odds are in favor of the one whose horses are more mettlesome.

All of these relationships correspond very closely to the general relationships in life. The relationships of gentlemen among themselves and with their drivers in the case of such collisions are also interesting.—"Hey there, you scoundrel, where do you think you're going?"—When this cry is addressed to the whole vehicle, the passenger involuntarily tries to assume a serious, or gay, or unconcerned expression—in a word, one that he did not have before. It is evident that he would be pleased if the situation were reversed. I have noticed that gentlemen with moustaches³ are especially sensitive to the insults sustained by their vehicles.

—"Who goes there?"

This shout came from a policeman who had in my presence been very much offended by a driver this same morning. At the entrance across from his sentry-box a carriage was standing; a splendid figure of a driver with a red beard, having tucked the reins under him, and resting his elbows on his knees, was warming his back in the sun—with evident pleasure, for his eyes

³ I.e., cavalry officers.—G.L.K.

were almost completely closed. Opposite him the policeman walked up and down on the platform in front of his sentry-box and, using the end of his halberd, adjusted the plank which was laid across the nearby puddles. Suddenly he seemed to resent the fact that the carriage was standing there, or else he began to envy the driver who was warming himself with such pleasure, or perhaps he merely wished to start a conversation. He walked the length of his little platform, peered into the side street, and then thumped with his halberd on the plank: "Hey you, where are you stopping? You're blocking the road." The driver unscrewed his left eye a little, glanced at the policeman, and closed it again.

—"Get a move on! I'm talking to you!" No sign of life.—"Are you deaf? Eh? Move along, I said!" The policeman, seeing that there was no response, walked the length of his little platform, peered into the side street once more, and evidently was getting ready to say something devastating. At this point the driver raised himself a little, adjusted the reins under him, and turning with sleepy eyes to the policeman, said, "What are you gawking at? They wouldn't even let you have a gun, you simpleton, and still you go around yelling at people!"

"Get out of here!"

The driver roused himself and got out of there.

I looked at the policeman. He muttered something and looked angrily at me; apparently he was embarrassed that I had overheard and was looking at him. I know of nothing that can offend a man more deeply than to give him to understand that you have noticed something but do not wish to mention it. As a result I became embarrassed myself; I felt sorry for the policeman and went away.

In the concluding pages, here omitted, Tolstoy describes his meticulous posting of the day's "weaknesses" from diary to "Franklin journal" by "putting little crosses in the columns." He goes on to reflect upon the nature of good and evil, to recount his sensations while falling asleep, and to expatiate on the causes of dream experience. Finally, he tells of planning a trip down the Volga from Saratov to Astrakhan and of the initial steps in hiring a boat for the purpose.

G.L.K.

MODERN COLLEGE USAGE

OR

What Is The Public Relations Office Saying?

by WILLIAM C. FELS

President of Bennington College

We have need of a *Modern College Usage*, a kind of brief supplement to Fowler's *Modern English Usage*, and I will gladly put the notes that follow at the disposal of its author. I know the book must be written because, for my sins, I have just re-read the first edition of *The College Handbook*, which I edited in 1951. This is a book of statements prepared by the member colleges of the College Entrance Examination Board to explain their characteristics, programs, requirements and costs to prospective applicants and their parents. I undertook to re-read it because, as a new college president, I felt the need to explain my own college, Bennington, in plain understandable English, and I kept finding that the words and phrases I was using, the common ones used to describe colleges and their aims, were at best loose and at worst meaningless. My reading of other college's statements about themselves gave me no help whatever. Here is all that I have learned.

Urban or rural. An urban college is not merely one that is in a city, nor is a rural college just a college in the country. An urban college is one that is in a position to enjoy the cultural advantages of a metropolis while at the same time retaining a rural character. Wagner College on Staten Island, for example, "combines proximity

to the cultural resources of the metropolis with the beauty and peace of the finest residential section of New York's least congested borough." Brown University, with the help of a topographical peculiarity, performs an even neater feat: "From the historic Market House one may look straight up College Hill to an elm-shaded campus. . . . The almost perpendicular hill has made it possible for Brown to retain the atmosphere of a country college." (In the view books of urban colleges it is hardly possible to see the buildings for the trees. The photography must be done by tree surgeons.)

On the other hand, a rural college is one that is placed in a lovely countryside but has easy access to the cultural advantages of the metropolis. Cedar Crest College in Allentown, Pennsylvania, "is ideally located in the Lehigh Valley convenient to other colleges and the cultural advantages of Metropolitan New York and Philadelphia." Hood College in Frederick, Maryland, explains that "to the advantages of the country campus and small town setting are added those of the metropolitan areas of Washington and Baltimore, which are forty-five miles away." Cornell, in Ithaca, which doesn't have a cultural advantage within easy jet flight, flaunts the remarkable results of its isolation: "The location of the University . . . far enough away from large cities to discourage 'week-end migrations,' has done much to weld together a student body representing every state of the union and most foreign countries, and studying in many diverse fields, giving to all a breadth of understanding, of knowledge, and of friendship difficult to attain

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in less favorable circumstances." Nor does Cornell overlook the advantages of its topography. "In a remarkable number of instances," it says, "the founders of American universities have chosen a hill-top as the appropriate site for an institution of higher learning. Ezra Cornell chose the top of an especially impressive hill . . ." The higher the hill, the higher the learning.

The suburban college, I need hardly add, has all the advantages and none of the disadvantages of city and country, and I think we can let it go at that.

Colleges, incidentally, seem obsessed by the need to reveal their exact relationship to nearby water. Beloit is "on the east bank of the Rock River." Carleton is "on the east side of the Cannon River, which flows north." Columbia is unaccountably silent about the Hudson, which not only flows north like Carleton's Cannon, but also south. Harvard, which you might have trouble finding otherwise, thoughtfully explains that it is "located on the Charles River, three miles from Boston." Lake Forest College is "on the shores of Lake Michigan." Northwestern, though much larger, and on the same lake, is on only one shore.

Men's or women's. A women's college is one that has none of the disadvantages of co-education but has several select men's colleges within a few short miles. Wells' 298 girls have "many joint activities with Colgate, Cornell . . . Hamilton, Hobart . . . Rochester and Syracuse." Cedar Crest is "convenient to other colleges." Russell Sage is blessed with "several other colleges . . . within a radius of a few miles, and in Troy itself is located Rensselaer Polytechnic Institute." (Russell Sage may say bluntly that R.P.I. is "in Troy itself," but R.P.I. says it "lies east of the main business section of Troy on a plateau overlooking the city and the Hudson River.")

This nearness of women's colleges to men's colleges is a very convenient arrangement for the men's colleges. It assures that there will always be a women's college nearby. Dartmouth is an isolated exception, but it settled up there to be close to the Indians, and who could have foreseen that the Indians would move away? In the absence of women, Dartmouth finds "the impact of youthful mind on youthful mind" rich and significant."

Small or large. All colleges are small colleges. *The New York Times* recently reported that Wesleyan University (which is a college, not a university—but let's not get into *that*) will expand to 1,000 students, thus losing its small-college status. Nonsense. At Columbia College of Columbia University (2,300 in 1951) "the various social and extra-curricular activities of undergraduate life in a small college are present in full measure." And Dartmouth (2,700 in 1951) "has held itself to such a size as to maintain those 'small college' traditions which have persisted since the days when faculty and students literally built the college together . . ." Wesleyan, which in 1951 said it "has always been and is determined to remain a small college" need not worry since there is no other kind.

The advantage of a small college is that it combines unity with diversity. For example, Washington and Lee (900 undergraduates and 160 law students in 1951) "is small enough to maintain a sense of unity, yet large enough to provide diversity." On the other hand, Wellesley (1,650 in 1951) "is large enough to provide diversity and small enough to maintain a sense of unity."

Public or private. I dwell on these matters of urban or rural, men's, women's or co-educational, large or small, public or private because they tend to be considerations in students' choice of colleges and I think they are largely irrelevant to whether a student will achieve his purposes in going to college. Largely, but perhaps not entirely. I once started to make this point by saying that a man should no more choose his college than his wife by whether she was large or small, urban or rural. I was interrupted by someone who said, "But it might make a difference whether she is privately or publicly supported."

The well-rounded man. This is a phrase used by men's colleges. Women do not like to picture themselves as spheres. Colgate educates "the whole man," a similar species. But it is not easy to do this, if we judge by its neighbor, Hamilton, which says plaintively that it "has graduated fewer men than you would find today on many university campuses."

I'm sure both parents and students have wondered how colleges that aim to produce the well-

rounded man know when the rounding has been accomplished and the bachelor's degree can be granted. The problem has a simple mathematical solution. The radius is the critical element. Obviously, no college wants to produce what Edward Chamberlain of Dartmouth called "the well-rounded man with the short radius." Assuming that the college's requirements are designed to achieve the college's aims, you must adopt three measures: points, which are used to measure the radius; concentration, which measures the proper mass; and distribution, which measures the proper volume of the sphere. (The ratio of concentration, or mass, to distribution, or volume, gives the density. It is important that the well-rounded man be dense.) Assuming the proper concentration and distribution, the problem is solved by applying the familiar formula for the area of a sphere, $4\pi r^2$, using 128 points as r . For our purposes it will be accurate enough to use 3.14 for π , although some colleges, Princeton for instance, round their men off to four decimals. The solution of the formula gives you 205,783.04 square points, the area of a well-rounded man, or bachelor of arts as he is called when finished.

Development of the individual. Progressive colleges, which are special, do not turn out well-rounded men. They "develop the individual." Students are individuals, all individuals have different capacities, and at college entrance, no capacities are fully developed. Faced with this almost infinite variety of individual capacities, none fully developed, the progressive college must make difficult choices. To over-simplify, if the student has a strong back and a weak head, which does the college develop, the back or the head? Faced with this dilemma, it "takes advantage of the student's interests." This is helpful if the student has any interests and if they coincide with the interests of the faculty. If they do not, progressive colleges are prepared to "counsel" the student, that is, to persuade him that both his interest and his individual development are crying for a course in elementary chemistry which the dean has reported is under-subscribed. If the student is not smart enough to see how his own interests and development will best be served, he can then be "counseled out," or, as they say in traditional colleges, "canned."

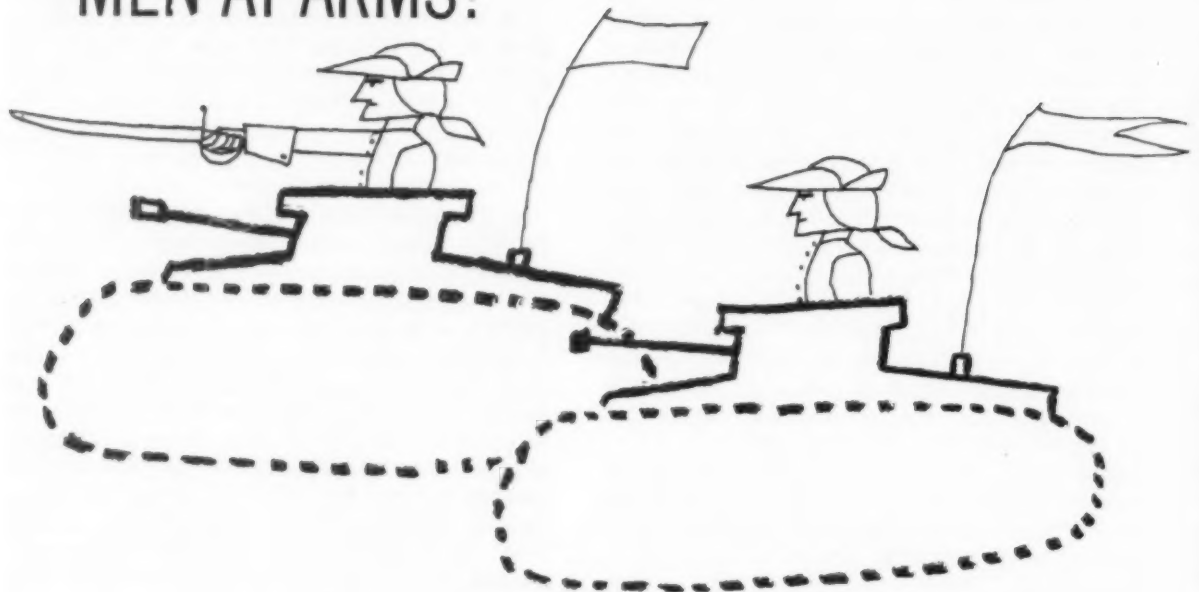
Bennington College says it is organized to "give students the greatest possible opportunity to develop their individual capabilities both as students and persons." At Bard, "a program of study is developed for each student on the basis of his own needs, interests and abilities . . ." (Fortunately, progressive colleges, no more than traditional colleges, do exactly as they say . . .)

High quality college. I have had to go beyond *The College Handbook* to find a definition of this most important and yet puzzling phrase. Indeed I have spent a good part of my life puzzling about the nature of quality in higher education. Now, at last, the phrase has been defined by the presidents of Amherst, Smith, Mt. Holyoke and the University of Massachusetts in instructions to a committee devising a plan for a new college under a grant from the Fund for the Advancement of Education. If I had only known it, the answer was lying right over there in the Housatonic Valley waiting for me. "By high quality education," say the four presidents, "is meant a type of education which is equivalent to that which each of our institutions offer."

Experimental college. I am grateful to the four presidents, too, for defining this equally difficult term which I must so often explain. It may be that their definition lacks something in sweep of vision and boldness of attack, though. Three hundred and twenty-three years after the founding of Harvard College it seems just a little anachronistic to define an experimental college as "a liberal-arts centered, residential college emphasizing a four-year undergraduate curriculum," but their colleges have achieved the goal of high quality that we poor experimental colleges only seek, and we should not doubt their wisdom.

To conclude. Bennington College is a small, rural, private, experimental, women's college of high quality which emphasizes the development of the individual. It shares the cultural advantages of New York, Boston and Montreal. Its hill is moderately high. From it, on a clear day, you can just see, beyond the toilet paper factory, the historic Walloomsac River flowing northward away from Williamstown, where there is a small, rural, private, experimental college of high quality for well-rounded men.

MEN AT ARMS?



The Regrettable Story of Our Military Manpower

by SAMUEL P. HUNTINGTON

The draft, pressure groups, and a nostalgic attachment to the 18th century support the "policy" by which the Government finds, trains, and maintains men who are to fight expertly in the nuclear and space age.

Americans, someone has said, are ruthlessly practical concerning physical objects and hopelessly sentimental concerning human beings. One would think so, considering the eagerness with which we have pushed the development of new weapons and space missiles and our stolid reluctance to change obsolete policies on military manpower.

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Whatever deficiencies there may be in our weapons are deficiencies of implementation, not concept. All things considered, the United States has moved ahead rapidly in its production of new machines of war. But despite constant reiteration of the cliché that "man remains the basic factor in war," manpower policy has only slowly adjusted to the requirements of the Cold War. The result has been curious: intercontinental missiles and thermo-nuclear bombs tied to the eighteenth- and nineteenth-century ideas and practices by which we find, teach and maintain people to man them.

The strategy we have adopted in the Cold War is fundamentally a dual one of deterrence and containment. To carry out such a strategy, we

need: (1) a massive deterrent force, equipped with nuclear weapons, missiles, and long-range jet bombers, protected by an adequate continental defense system, and strong enough to deter a major Soviet attack on the United States or Western Europe; and (2) "brush fire" war forces either highly mobile or deployed in likely danger spots, and adequate in their strength to deter or quickly repulse local aggressions.

The maintenance of these forces demands three things of our military manpower policy: *First, far more men under arms than we have traditionally maintained in peacetime (though fewer than we have had to mobilize in either of two world wars)*; this because of the multiplication of our geographical commitments and the variety of contingencies that we must be prepared to deal with. *Second, the maintenance of these armed forces at a degree of readiness without precedent in American history.* In the past, the United States has had months and years to prepare its armies for war. Never again. The reaction time for a retaliatory and air defense force must now be measurable in hours, and soon in minutes. The ability of local war forces to deter an attack or quickly to repulse one requires them to fight or to move at a moment's notice. Consequently, military policy must give first priority to existing ready forces.

Third, a far greater technical competence is required of the men in our armed forces than ever before. In the eighteenth century, virtually every farmer knew how to use a musket, and a group of farmers could easily be transformed on short notice into a company of infantrymen. Today, civilians are much less military, and the military are much more technical. Training a fighting man is an expensive and time-consuming task, requiring months and in some cases years. A trained officer or an enlisted man skilled in a technical specialty represents an investment of thousands of dollars. Once he is trained, the real interest of the government lies in keeping that man in service for as long as he is useful.

If, in the eighteenth century, civilian life prepared men for military service, military service today has the effect of preparing men for civilian careers.

Fulfilling the above three requirements for modern warfare should produce a professional,

reasonably-sized, combat-ready military force composed of officers and enlisted men skilled in their trade and pursuing military service as a lifetime career; a reduction in the number of short-term and part-time soldiers; a reduction of reserve forces; less dependence on the draft; and an increase in the status and popular prestige of the military career.

Why have we been unable to accomplish these ends and meet these realistic requirements? To begin with, Americans in and out of government have long cherished the tradition of a small standing army supplemented in emergencies by large numbers of civilians called to the colors. Lacking an aristocratic tradition or threatening neighbors, our American business society has seldom seen much need for professional military men and has attached little value to the military career. Such attitudes are slow to change. They have been concretely reflected in the pay levels and living conditions of the members of the armed services. The "citizen-soldier" concept has refused to die despite its lack of relevance to the military needs of the mid-twentieth century. And it has been actively defended in Congress by the potent influence of the National Guard and reserve organizations. Moreover, when the military dollar must be stretched to the limit, reserve forces always *appear* to be much cheaper to maintain than active forces. The confused picture which we have had of the nature and seriousness of the Russian threat has led us to rely upon temporary expedients, such as the draft, and to postpone facing the question: What sort of military manpower policy is required by the Cold War?

Since World War II, our manpower policy has taken two sharp turns and ended nowhere. Here is what happened to UMT and what might be called the "massive reserve" movements.

In 1945 and 1946, governmental leaders almost unanimously agreed on the desirability of universal military training in peacetime. Previously, there had been no system for training citizen soldiers. UMT was to make the old—the very old—idea of a small standing army and a large citizen reserve a workable reality. The proposal most commonly supported was for six months' or twelve months' training followed by varying lengths of time spent in the regular

services, the National Guard, or the reserves. The assumption behind this proposal was not, perhaps, unreasonable in 1946—that any future war would probably be similar to World War II. UMT seemed one way to appreciably shorten the time required for mobilizing and putting into action vast armies of—citizen-soldiers.

The struggles over UMT from 1945 through 1952 were an instructive example of the political processes of American democracy. UMT was energetically supported by Presidents Roosevelt and Truman, by the professional military leaders of the Army, by veterans and patriotic groups, and by a fairly consistent sixty to seventy per cent majority of the general public (according to public opinion polls). Off-hand, it would seem that this combination of Administration, military, and popular approval should have sufficed to see UMT enacted into law. But the opposition, consisting of educational, farm, labor, church and women's groups, was simply too influential in Congress. UMT came close to adoption in 1947 and 1948 and again in 1951 and 1952, but each time this coalition succeeded in defeating it.

Ironically, the nation was prevented from adopting a military manpower policy ill-suited to its needs by a number of civilian groups who were unconcerned with strategy and hostile to military requirements—who were, in some cases, strongly pacifist.

The shift from UMT toward the idea of massive reserves began in 1952. In July of that year Congress passed the Armed Forces Reserve Act, designed to prevent a repetition of the inequities by which well over a million young men who came of age between 1946 and 1950 had escaped military service entirely while thousands of their older brothers who had served in World War II were recalled to fight in Korea. The act authorized a Ready Reserve of 1,500,000. It presupposed, however, the existence of UMT, which Congress had killed four months earlier. Without UMT, the only major source of men for a trained reserve remained the veterans of active service. The 1952 reserve act thus solved nothing.

A new administration and the Korean armistice obviously required a new look at reserve policy, and in 1953 President Eisenhower asked the National Security Training Commission to study military manpower needs. The Commission's report in December 1953, entitled signifi-

cantly "Twentieth Century Minutemen," was an eloquent restatement of the traditional goal of a large and effective reserve of—citizen soldiers.

The Commission, made up largely of civilians and headed by Julius Ochs Adler, Vice President of *The New York Times*, argued persuasively that our choice was either to maintain large standing forces, exorbitantly expensive and "dangerous to democratic institutions," or to have a small active force supplemented by a large citizen reserve. Only the latter was in accord with American tradition, the Committee insisted, and emphasized the point with a salvo of quotations from Washington and Jefferson on the virtues of the citizen militia. Our slow and disorderly mobilization in the last three wars was attributed to our not having had an effective reserve system. In the next war, said the report, with time at a premium, the repetition of previous follies would be disastrous.

Accordingly, the Commission recommended a comprehensive program, the point of which was that eventually all young men not drafted into the active forces should be required to receive six months' training followed by seven-and-a-half years in the reserves. In practical effect, of course, this was universal military training—with the emphasis shifted from training to the availability of reserves.

Throughout 1954, the NSTC report was debated in the Department of Defense. Finally, in December of that year, Secretary Wilson unveiled the Administration's National Reserve Plan, which turned out to incorporate the most important of the NSTC recommendations. The Administration's spokesmen made clear that behind their support of the massive reserve idea was a desire to reduce military expenditures: reserves were supposed to be cheaper than active forces. The costs of one man on active duty, the Administration estimated, equalled the costs of ten reservists. Simultaneously with the presentation of the National Reserve Plan to Congress, the Administration recommended a military budget which would have cut 350,000 men from the active forces.

"The strength of the Active Forces," Admiral Radford told the Senate Armed Services Committee, "has been determined largely in conjunction with our plans for the Reserve components." And when General Ridgway protested that the

cuts left the Army unprepared to carry out its commitments, Secretary Wilson replied blandly that: "Reserves are the key to the solution of the Army's problem . . . Even if the millions of reserves or veterans are not properly trained, they could be regrouped or formed into effective reserves pretty quickly."

Besides tradition and the desire to reduce expenditures, a third influence shaping the Reserve Forces Act was the attitude of Congress. Although the reserve bill went through a tortuous legislative process and was weakened in many respects, the final law preserved the concept of a large reserve and the essence of the Administration's plan. Congress has supported the "citizen-soldier" long and faithfully and has been historically sympathetic to the needs of the reserves. Reserve organizations, such as the National Guard Association and the Reserve Officers Association, carry great weight on Capitol Hill. Congressmen cannot afford to forget the interests of the reservists in their constituencies. As Representative Overton Brooks, the principal congressional sponsor of the Reserve Act, declared, referring to the drill pay received by the members of the Ready Reserve,

. . . a large Reserve means more money in the local community—money which is classified as "spendable." It is that kind of money . . . which the Reservist is more inclined to spend freely on the local economy rather than computing it in the overall family budget. The amount involved is something over \$25,000 per year for every 100-man unit.

The National Guard Association in particular insisted that the Guard must be maintained as part of the nation's "first line of defense." It consistently rejected the idea that the Guard be used for anything but combat—civil defense and home defense had been suggested. When Assistant Secretary of Defense John Hannah had murmured such suggestions in 1954, President Ellard A. Walsh of the NGA immediately replied that if Hannah or "anybody else for that matter believes that the Army National Guard can be built up and maintained by assigning it to a home-guard role in the national defense system, he has never been more mistaken in his life, and the entire National Guard, Army and Air, will resist to the utmost the imposition of any such concept."

The Guard won its point. The result was the Armed Forces Reserve Act of 1955, which aimed to have a Ready Reserve (weekly drills, two

weeks a year on active duty) of 2,900,000 men by 1960. Virtually all of these men were to be in organized units, trained and ready for immediate recall in an emergency. To fill this massive reserve force, the Act obligated all men who volunteered for or were drafted into the armed services to serve five years in the Active and Ready Reserves: a draftee spending two years on active duty, for instance, would serve three years more in the Ready Reserves. In addition, the Act permitted 100,000 youths each year between the ages of seventeen and eighteen-and-a-half to enlist in a special six months' training program to be followed by seven-and-a-half years in the Ready Reserves. The Act made Ready Reservists who failed to meet their obligations liable to recall to the active forces and to court martial.

By 1957, the epic aims of the Reserve Forces Act were still a long way from full realization. But progress toward them had been impressive. A million reservists were attending weekly drills and summer camps. After a slow start, the six months' training program was being flooded with eager young volunteers. Expenditures on the Reserves, rising steadily from less than half a billion dollars in 1952, had reached about one-and-a-quarter billion dollars. New armories and reserve training centers were being built rapidly. In the National Guard alone, almost half a million men were organized into an imposing military force including:

- 21 infantry divisions
- 6 armored divisions
- 9 regimental combat teams
- 9 armored cavalry regiments
- 61 field artillery battalions
- 19 armored field artillery battalions
- 123 anti-aircraft battalions
- 25 tactical interceptor wings
- 2 tactical reconnaissance wings.

To these could be added the twenty-five divisions—ten designed for overseas combat—planned for the Army Reserve, the twenty-four troop carrier and fighter bomber wings at the disposal of the Air Force Reserve, plus the 190,000 participating members of the Navy and Marine Corps Reserves. Compared with their predecessors, the reserves of 1957 indeed justified the NSTC's boast that they were "a success"!

Only one problem went unanswered. Just what

relation did this burgeoning force have to the military requirements of the Cold War? True, a small number of National Guard interceptor squadrons and antiaircraft battalions kept on an "alert" status were useful in continental defense, but of what use, exactly, were the infantry and armor divisions? Did a million reservists help deter Communist aggression in the Middle East or Southeast Asia? Were National Guard armories taking funds which might otherwise go into guided missiles?

The unreal character of American reserve policy was made all too clear by the fact that in 1955, when this country was busy building toward a quota of 2,900,000 participating ready reservists and *thirty-seven* reserve divisions, the British sensibly planned to send only two, instead of eleven, reserve divisions overseas in the event of an emergency. The other nine were to be reorganized for home defense and civil defense functions. Instead of converting reserve infantry divisions to armor as we were doing, the British proposed to convert their two-and-a-half reserve armor divisions to infantry. (What use are tanks in civil defense?)

Instead of encouraging the formation of separate state guards for home defense as we did in 1955, Britain proposed to de-activate her comparable force, the Home Guard, its functions to be taken over by the revamped reserve divisions. Later, in its 1957 White Paper on Defense, the British government announced the further disbanding of many units of the Royal Auxiliary Air Force and the Royal Navy Volunteer Reserve and its desire to shift its remaining two Territorial Army divisions with overseas missions to home defense duties. These divisions had been earmarked for NATO, but, as the government said, in the event of an attack, they "would not be ready for action on the Continent in less than three months, which in nuclear war would be of little value."

At almost the same time, the Chief of Staff of the United States Army was telling Congress of the Army's plans to ship National Guard divisions to Europe *six months* after the outbreak of war.

In the spring and summer of 1957, just as the reserve program was hitting its stride, an economy wave engulfed the Defense Department. However dubious its other benefits may have

been, it did force a second look at the reserve build-up. Too late, it was recognized that the reserves were less a way of saving money than an omnivorous consumer of it. The reserve campaign was directly affecting the readiness of the Active Forces. Speaking of the influx of volunteers into the six months' training program, Secretary of the Army Brucker declared: "This load will overtax the capabilities of the training establishment, which in turn will require that we place an increased training burden upon our strategic Army forces at a sacrifice of overall combat readiness."

Budgetary reductions plus the post-Sputnik preoccupation with outer space led the Administration to reverse its reserve policy. Given the popularity of the "citizen-soldier" concept, however, this was easier to announce than to accomplish. In the budget presented to Congress in January 1958, the Administration proposed to reduce the strength of the Army National Guard from 400,000 to 360,000 and to make comparable cuts in the Army Reserve. Within a matter of days the pages of the Congressional Record smoked with outraged protests from local reserve organizations, governors, and congressmen. Overton Brooks' House subcommittee on reserve policy listened to the anguished cries of several governors, and the House adopted a resolution condemning the cuts. The Appropriations Committees were not to be outdone in their devotion to the citizen-soldier, and, finally, in what President Eisenhower described as an "unprecedented" action, Congress wrote mandatory minimum strengths into law: the Army Reserve had to be maintained at 300,000 men and the Army National Guard had to be kept at 400,000.

At the same time, the Administration was backing down on another front. In line with the proposed budgetary cuts in the reserve and with the desire to streamline the reserve structure anyway, the Army announced in March of last year a plan to eliminate six Guard and four Reserve divisions, reduce and consolidate many smaller units, and change the remaining twenty-seven divisions into "pentomic" units with fewer men and more nuclear weapons. The Guard Association immediately took umbrage, and the Army compromised on a plan which would keep all twenty-seven Guard divisions in existence while reducing the strength of sixteen of them.

The battle over the size and shape of the reserves has been renewed in the present 86th Congress. The President angrily demanded the repeal of the mandatory minimum strengths for the National Guard and Army Reserves and again recommended cuts in their personnel. The results of his pleas, however, will in all likelihood be very little different from those of last year.

The point, however, remains what it was. Massive reserves, like UMT and so much else in our manpower policy, have little place in a world of nuclear retaliation and brush fire wars. At the same time that the costs of the reserve program were mounting in 1957, the Administration delayed, for budgetary reasons, acting on the recommendations of the Cordiner Committee for a revised and higher pay scale for the regular forces. In 1958, this legislation was brought out and approved by Congress. It represents one step—but only a first one—towards the creation of a set of inducements which may eventually enable the services to obtain and to retain, by voluntary means, the men they need. Continued progress toward a nuclear-age force will, however, undoubtedly require the steady reduction

of our eighteenth-century citizen-soldier force. The age of the nation-in-arms, of citizen-soldiers, and—hopefully—of total war is over.

Deterrence and containment demand ready professional forces. A thoroughly new approach to the organization of military manpower is in order, one in which reserves, pay, enlistment and recruitment, and the draft are combined into a twentieth-century manpower policy which is relevant to our current strategic needs.

The status quo, no matter how unsatisfactory it is, however, will not be changed easily. This spring, when Senator Case proposed to establish a Commission on Military Manpower to make a thorough investigation of the entire subject, his colleagues voted him down decisively. Obsolete ideas and vested interests are still entrenched on Capitol Hill. Clearly, the Pentagon will have to assume initiative and the President assume leadership before changes can be made. Manpower policy cannot indefinitely remain out of step with the rest of our military program. Continuation of a policy appropriate to the last war can only enhance the likelihood of a new one.

The Educated Class: every little movement . . .

. . . As for the trip in the reverse direction—the 'mission' or Fulbright or attachéship—its character is well described by the name it has acquired among its devotees. It is a junket, and our leading men have quickly learned the taste for it. Pleasure and prestige alike depend on being away as often and as long as possible . . . You have just been appointed to a new and important post; should you not like to leave it and see how others go at the same task? Or, alternatively, do you wish to lecture in Rome, to observe the educational system of Baluchistan, to confer with a select group of your peers in Karachi, to learn new methods of wool-gathering in New Zealand? All you need is a modest reputation and a little persistence. To be sure, you must have faith in your ability to accomplish something in three days or three weeks, or else an intense desire to interrupt for three years whatever you are accomplishing where you are. In either case, the opportunities of release by 'exchange' are today nearly as good as in a war . . . (*Jacques Barzun, in THE HOUSE OF INTELLECT, published by Harper, 1959.*)

I've Been Reading

The Tutelage of Power

(With a revelation by the author)

by LINDSAY ROGERS

"Politics," wrote Gladstone in the year of his retirement, "are like a labyrinth from the inner intricacies of which it is even more difficult to find a way of escape than it was to find the way into them." So far as his own career was concerned, the "Grand Old Man" (aetate 85) was romancing. At the age of twenty-three he had made an easy entrance into the House of Commons ("by the Duke of Newcastle's interest") and during the next sixty years was without a seat for only a few months, and this by his own desire. Of the five different constituencies he represented, only one, but his favorite, Oxford University ("I love her from the bottom of my heart") repudiated him. Prime Minister in 1868, and Prime Minister for the fourth time in 1894, he was staying in the labyrinth too long for the good of the Liberal Party. The way of escape was clear: he should follow the advice of his colleagues and resign. This he finally did.

We need not quarrel with Gladstone's description of politics as a labyrinth. Political lives are indeed led in "an intricate structure of inter-

Burgess professor of public law at Columbia, Lindsay Rogers served under FDR as Chairman of the Board of Labor Review and as Departmental Administrator of the NRA. The author of many books, including THE PROBLEM OF GOVERNMENT and THE POLLSTERS, he writes frequently for THE REPORTER.

communicating passages through which it is difficult to find one's way without a clue."

Few persons who have moved through the Anglo-Saxon labyrinths or who have studied them have tried to suggest clues to aspirants for entry and then for movement to higher places. We have had autobiographies galore, but even the best ones of all time, the war memoirs of David Lloyd George and Winston Churchill, while contributions to history and magnificent political apologies rivalling Bismarck's *Reflections and Recollections*, give little advice to the tyro. He must learn from examples and there is little evidence that he seeks to do so.

On the Continent the literature has been so considerable that one must be quite selective. Between Machiavelli's *Prince* (1513) and the French Revolution there were many compilations of maxims intended to guide a statesman in the performance of his tasks. Even before Machiavelli, Philip de Commines—Lord of Argenton, chamberlain, councillor and envoy of Louis XI—had written memoirs which were published in 1525, fourteen years after his death. De Commines' most important maxims dealt with "summit conferences." He described meetings between Louis and Henry IV, King of Castile, and Louis and Edward IV of England, and explained why one should take a dim view of the utility of such gatherings.

After Machiavelli came Guiccardini, whose *Ricordi Politici* has been described as "Italian corruption codified and elevated to a rule of life." They were dull reading; Macaulay's convicted criminal (no schoolboy), offered a choice of penalty—to read Guiccardini or go to the galleys—began to read, and then decided that the other punishment would be less severe. Cardinal Richelieu wrote his *Testament Politique* as a private treatise of advice for his sovereign, Louis XIII; and when the education of Louis XIV was under discussion there was a flood of manuals. In this century we had had an intriguing little book, *Le Politique*, by Louis Barthou, minister in a dozen of the Third Republic's cabinets, whose French Nicholas Murray Butler declared was the most beautiful he had ever heard.

In English similar literature is scanty. James I—"the wisest fool in Christendom"—wrote a treatise on how a king should behave, *Basilikon Doron*, but his maxims, although pious, rarely

show much insight. Catherine the Great was more perceptive. "You philosophers are lucky men," she once said. "You write on paper, and paper is patient. Unfortunate Empress that I am, I write on the susceptible skins of living beings." There are some civil precepts in Bacon and many flashes of wisdom in Burke, but not until 1832 was there an English manual in the continental tradition.

Then Sir Henry Taylor, a minor poet, but an outstanding permanent official, published a little book that he called *The Statesman: An Ironical Treatise on the Art of Succeeding*. Even though Gladstone had vetted the book, it fell flat; but re-published in 1927, with an introduction by Harold Laski, it was widely read, and last year there was a new edition published by Signet. Also, a quarter of a century ago, F. S. Oliver's *The Endless Adventure*—of governing men—contained a charming introductory essay on how politicians should behave in order to be successful. He quotes Prince Bülow as quoting Disraeli: "Professors and rhetoricians invent systems and principles. Real statesmen are inspired by nothing else than their instinct for power and love of country." There is no reference. I doubt whether Disraeli ever said it, but is it true?

In the United States modern Machiavellis have occasionally dealt with political bossism and the cajoling of electorates but, to use Sir Henry Taylor's words, "the art of exercising political functions, which might seem to be no unimportant part of political science, has occupied hardly any place in the speculations of its professors." Recently, however, there have been flutterings in some academic dovecotes (not in Columbia's Department of Public Law!) and political behavior is being subjected to "scientific" analysis. Young men talk of "empirical power indices" and "coefficients of reproducibility" and pretend to be able to predict the political behavior of judges—how the Supreme Court will decide right to counsel or search and seizure cases. Soon, it is to be expected, they will produce mathematical formulae that tell us whether a turgid paragraph in a presidential press conference answers a question with a "yes" or "no" and how we should deal with the "Berlin crisis." Fortunately, they will write in a foreign language.

Rexford G. Tugwell, for some years an ornament of Columbia's department of economics, writes excellent English. Even readers who think some of his judgments slightly awry will enjoy his latest book, *The Art of Politics* (Doubleday), which deals with three successful practitioners of this art: Franklin Delano Roosevelt, Luis Muñoz Marín, and Fiorello H. LaGuardia, and is in the tradition of Richelieu and Sir Henry Taylor. Assistant and Undersecretary of Agriculture in Mr. Roosevelt's sub-cabinet, chairman of Mayor LaGuardia's Planning Board, and then Governor of Puerto Rico when Muñoz Marín was rising to political eminence, Mr. Tugwell had exceptional opportunities to watch three political artists at work. I cannot think of any other professor who emerged from his ivory tower to make such varied contact with political reality.

But, although Mr. Tugwell's appraisals are always acute (even when somewhat condescending), this book will not be of much use to persons, who, in Sir Henry Taylor's phrase, want to perfect themselves in the "art of rising." As Mr. Tugwell says, "the sense in which [the practitioner of politics]

uses any learning or intelligence is very different from the usual meaning of those words. It is true that he did not get his skill from nowhere; and if he did not get it from nowhere, he must have got it from somewhere. But the source is generally mysterious. This being so, there is no skill and no course of study really to be recommended for aspiring mayors, governors, or presidents.

Cardinal Richelieu went further: "There is nothing more dangerous for a State than men who seek to govern kingdoms on the basis of maxims that they have got from books."

The word "luck" does not appear in Mr. Tugwell's index, but he realizes that it frequently plays a large part in the success of one whom Adam Smith described as "that insidious and crafty animal vulgarly called a statesman or politician." In Great Britain luck is less important and it is possible to spot future ministerial, even prime ministerial timber, when it is still in the sapling stage. But sometimes the seasoning goes on for an unconscionably long time. Queen Victoria's eldest son, the Prince of Wales, waiting to be Edward VII, used to say: "Everyone has an eternal father, but I have an eternal mother." Anthony Eden must have thought of that when Winston Churchill was postponing his

retirement.

Even in Great Britain, timing is of importance. Emergencies may call for new men. But for the emergencies of war, would Lloyd George and Winston Churchill ever have reached what Disraeli called "the top of the greasy pole"? Could not Asquith and Neville Chamberlain have carried on until they handed over to less mercurial successors? Clemenceau would not have become President of the Council in 1917 if he had not been the last ministerial card that the French parliamentary system had to play.

But it is in the United States that luck and timing have been most potent. Death or assassination has made five of our presidents; military glamour has made four. If, in 1920, Hiram Johnson had not spurned the vice-presidential nomination, Calvin Coolidge would not have been President. If, in 1928, Al Smith had not succeeded in persuading Franklin Roosevelt to run for Governor of New York, and if the Governor, barely elected in 1928, had not rolled up a tremendous gubernatorial majority in 1930, could he have been the leading candidate at the Chicago convention of 1932? And as for La Guardia? The Fusionists of 1933 settled on him *faute de mieux*. They searched in unlikely places—even on Morningside Heights—to turn up a possibility that would keep them from being saddled with "The Little Flower." A *New Yorker* cartoon accurately portrayed the mood of the moment. A frock-coated Fusionist leaned out of the window of his limousine and hailed a pedestrian: "Hey, how'd you like to run for Mayor of New York?"

Of Mr. Tugwell's three statesmen, only Muñoz Marín did not have to be shot with luck. If he was not the father of the *Estado Libre Asociado de Puerto Rico*, he was at least a principal architect of the edifice he was to manage. Of American presidents, we can say that only George Washington was inevitable. Muñoz Marín was an inevitable Governor of Puerto Rico if he wanted to be governor, and he did. Bismarck thought that "the task of a statesman consists only in listening carefully whether he can catch the echo of the strides of the Almighty through the events of this world, and then to spring forward and seize the hem of his garment." The garment descended on Muñoz Marín.

Perhaps properly, Mr. Tugwell is more interested in policy than in maneuvering, and, in

his view, whenever his three political artists moved to the "right" they broke faith and were heading toward perdition. The most striking alleged apostasy was in the case of Muñoz Marín who, according to Mr. Tugwell, thought that the Republicans would control Washington in 1948 and that "the success of his Puerto Rican adventure depended on adjustment to more conservative standards." These fears, it seems to me, may have showed cautious wisdom, but in Mr. Tugwell's view, they were a "major error," for the Puerto Rican program called for "the public ownership of utilities and the land." State socialism was abandoned to make "a gesture of appeasement." I doubt whether Muñoz Marín would agree but it is a curious explanation of, and comment on, a result that I think even Hugh Gaitskell would applaud.

In politics, as in the other arts, anticipations of whether young practitioners will reach the heights are sometimes frightfully awry. Lenin once described Molotov as "the best filing clerk in Russia," and in 1917 thought that Stalin would be an admirable Commissar of Nationalities: "No intelligence is needed; that is why we have put Stalin there." Even after four years of service in Albany, Franklin Roosevelt seemed to Walter Lippmann no more than an admirable gentleman with no qualifications for the presidency. Mr. Lippmann blundered badly. La Bruyère was right: "Eminent place makes the great man greater than he is."

Mr. Tugwell thinks that if this great man had lived, the cold war might have been avoided or that at least temperatures might have been more moderate: "Uncle Joe" would have sought to get along with his admiring nephew. I doubt it, and suggest that Mr. Tugwell errs in his crystal gazing as badly as Walter Lippmann erred in his judgment. An avuncular relationship might have persuaded Stalin to watch his manners for a little while, but Soviet policy would have been the same. My guess is that, when we are all dead, historians will call Franklin Roosevelt a great war president, and then go on to say that he fumbled badly in preparing for peace.

Mr. Roosevelt prided himself on not being an amateur so far as strategy was concerned (he admitted privately that Churchill was more of a professional) but, like Churchill, he hesitated to overrule a considered and determined opinion of

his military advisers. In preparing for peace, the President considered himself all-wise; he thought the British should give up Hong Kong, but was willing for "Uncle Joe" to get what he wanted in the Far East. He kept the State Department at arm's length and was indifferent to quarrels between it and the War Department over what the armistice agreements should provide. Churchill had said that he wanted to shake hands with the Russians as far to the East as possible, but the American Generals refused to see his point.

"Personally and aside from all logistic, tactical or strategical implications, I would be loath to hazard American lives for purely political reasons," General Marshall wrote to General Eisenhower, and the latter agreed. So did General Bradley: "As soldiers we looked naively [*sic*] on this British inclination to complicate the war with political foresight and non-military objectives." The unconscious slip makes the judgment sound. General Bradley's gaze was "characterized by unconventional simplicity or artlessness." But shades of Clausewitz!—had the Generals (or the President) never heard of his political testament: "War is a continuation of policy by other means"? Hence the melancholy title of the last volume of the Churchill memoirs: *Triumph and Tragedy*.

The truth seems to be—and it is implicit in Mr. Tugwell's pages on Roosevelt—that when a political artist comes to deal with matters that he thinks he understands, he feels himself sanctified by the high office he holds and is indifferent to and may resent advice that challenges the excellence of his intentions.

Mr. Roosevelt had no such self-confidence when he sought to move his studio from Albany to Washington. He then had assistance on policies and on what he should say about them from a group of advisers whom James Kieran, Albany correspondent of *The New York Times*, dubbed the "brains trust." Its chief was Raymond Moley and Mr. Tugwell was the leading ranker.

Mr. Moley says in *After Seven Years* that I was "the second recruit," but he is wrong. During this period I was never taken to meet my friend Samuel I. Rosenman or Basil O'Connor, who were confirming Mr. Moley's nominations. Nor did I see Franklin Roosevelt from the time of his gubernatorial candidacy until one day in

the late summer of 1933 when, with General Hugh Johnson, one of whose deputies I was, I went to the White House to discuss a matter connected with the newspaper code on which I was holding hearings. But the legend has persisted and this is a good place to scotch it. Only the other evening at dinner, when I was introduced to a former member of President Eisenhower's intimate entourage, my host described me as a brains truster. Frank Freidel, the Roosevelt biographer, says that I "withdrew from active participation" because of an "incident." There was no "active participation" but there was an "incident," and here, for the first time, is my version of it.

During the Spring of 1932, Walter Winchell emceed a Lucky Strike radio program and offered free time to aspirants for the forthcoming presidential nominations. I was not an economist but the iniquities of the Hawley-Smoot tariff were plain to persons ignorant of the "dismal science." So, on March 22, I sent Al Smith something on the tariff that he might use on the Lucky Strike dance hour. Mr. Smith's ten minutes on March 31 were devoted almost entirely to a discussion of balancing the budget by a tax on beer—an extremely silly proposal.

I was persistent in my concern with the Hawley-Smoot Act, and, making a few verbal changes that eliminated a reference to the Smith presidential candidacy of 1928, I gave a revised manuscript to Raymond Moley on April 2, and he in turn gave it to Judge Samuel I. Rosenman. On April 7, Governor Roosevelt used his Lucky Strike minutes to discuss the common man and the Reconstruction Finance Corporation, and it appeared that Mr. Winchell's audience was not to hear anything about the tariff save for a sentence or two that did seem to have been paraphrased from my memorandum (e.g., "The value of goods internationally exchanged is today less than half of what it was three or four years ago.")

Governor Smith was to be featured speaker at the Jefferson Day dinner in Washington on April 13, and, on April 11, I was told that he might want to say something about the tariff. My reply was that his files should contain the manuscript that I had sent on March 22. The night of the speech the Tugwells and my wife and I dined with the Raymond Moleys. When Smith talked of the tariff I recognized some of

my language. "Not very profound," I remember remarking to my colleagues, but did not admit authorship. (It was not long after this that ghosts were to boast of their ghosting, and now headlines blaze: "Johns Hopkins professor to be President Eisenhower's speech writer.")

On April 15, Mr. Moley, as he records in his book, called me up from Rochester and read me considerable stretches of what Governor Roosevelt was proposing to say in a speech at St. Paul. What Mr. Moley read related to water power, electricity, etc. and made no mention of the Hawley-Smoot bill. But when Governor Roosevelt's St. Paul speech was published in the papers of April 19 it contained a discussion of the tariff that had been lifted from my memorandum, even to the colon used in the penultimate paragraph; FDR had interpolated one characteristic Rooseveltian crack—the failure of 1,000 economists to agree on anything before. The language that was identical to both memorandum and speech I have italicized. The Roosevelt addition is in brackets.

The Hawley-Smoot tariff law of 1930 was a drastic revision of the tariff upward.

The existing tariff levels were already high enough to protect American industries which needed protection. The increases which the Hawley-Smoot bill made were not based on any scientific analysis of tariffs. The increases were political favors. *The consequences of the Hawley-Smoot bill have been tremendous, both directly and indirectly. Directly, American foreign trade has been steadily dwindling. Indirectly, the high schedules of the Hawley-Smoot bill caused European nations to raise their own tariff walls, and these walls were raised not only against us but against each other.*

The result has been that the value of goods exchanged internationally in the last year or so has been less than 50 per cent of what it was three or four years ago. When the Hawley-Smoot bill was passed, European states were endeavoring to negotiate reciprocal arrangements which might have caused the lowering of European tariff walls. Our action prevented such an arrangement, and since 1930, when Congress acted and the President signed the law, European tariff barriers have gone higher and higher.

Just before the Hawley-Smoot bill was presented to the President for his signature, a thousand American economists told the President that he should not sign the law. [I am told that never before in history have so many economists been able to agree upon anything, but the faults of this bill were so open and palpable that they found easy agreement.]

With really prophetic insight, they warned him in detail of what would happen, and the detail that they gave him is the detail of what has happened: no

benefit to the farmers, injury to American export trade, weakening of the security of American investments abroad, increase of unemployment and encouragement of a world-wide tariff war.

The President ignored this warning. Would he have ignored a warning by a thousand engineers that a bridge which the National government was building was unsafe?

In *After Seven Years* Mr. Moley says that during our telephone conversation he told me that "three sentences were being taken verbatim" from my memorandum and that in order to "avoid any slip-up" he read "the entire passage from the speech relating to the tariff—including his sentences." The entire passage was mine and I did not hear it over the telephone. Had I done so, how could I have failed to be complimentary about Governor Roosevelt's improvement?

On April 20, 1932, I dictated a memorandum setting down the chronology and noted: "Roosevelt, if attacked with plagiarism from Smith, can produce the same defense that Theodore Dreiser did when Sinclair Lewis charged him with copying from his wife. Dreiser's defense was that he had not copied from her but that they both had copied from the same Russian. Roosevelt can say 'the same professor.'"

On April 22, the *Evening Post* made the discovery and correspondents and cartoonists had a merry time. Al Smith riposted, "Well, I said it first, didn't I?" Raymond Moley issued a statement naming me as the culprit. Roosevelt and I remained silent. Mr. Moley says that I was "consulted several times in the summer and autumn of the year and was always helpful," but that my "relationship to the Roosevelt candidacy was never intimate again." It never had been intimate, and I doubt whether it was helpful. I summered on Martha's Vineyard and recall nothing more important than telling Raymond Moley to beware of a pronouncement on foreign policy by a gentleman who later became eminent in the State Department and elsewhere.

Years afterwards Malcolm Muggeridge (later to be editor of *Punch*) explained the "curious and somewhat embarrassing incident" by pointing out "that the two professors consulted were friends, a contingency so improbable that it could scarcely have been foreseen." Ray Moley is still my friend. So is Rex Tugwell. In 1932 the *Paris Temps*, to the marriage of true minds seeing no impediment, told its readers that President Roosevelt's "conseiller personnel" was "le professeur Moley-Tugwell."

Columbia

CHRONICLE

A concise review of recent news from Columbia University

The firing of American and Russian moon rockets this winter prompted Columbia astrophysicist Lloyd Motz to predict that men will land on the moon "within a reasonably short time, say two years." In an interview on the campus Dr. Motz carried further certain views expressed in the Fall 1958 issue of the FORUM ("A Jaunt to the Limits of the Universe"), saying that Russians will probably land on the moon first, judging by the greater size and weight of their "Lunik" rocket and the power demonstrated in its firing. He also said that the results of Russian experiments in a laboratory in the Himalayas, in which certain of the physical conditions believed to obtain on Mars were reproduced, indicate that Russian fliers may also land on Mars quite soon. He disagreed with Major General John B. Medaris, head of the Army's missile program, who had said that the Pioneer IV rocket put this country's rocketry in the "same league" as the Russians'.

Work was begun in April on the University's fourth building-in-progress, the 13-story Seeley Wintersmith Mudd Building—first unit of the new Columbia Engineering Center.

Among the last and largest gifts to allow the start of construction on the Engineering Center was a \$6 million bequest to Columbia by the late Henry Krumb, '98 Mines, for whom the School of Mines will be named; very large grants were also made by the Seeley Winter-

smith Mudd Foundation and the Ambrose Monell Foundation. Rising at 120th Street and Amsterdam Avenue, the new building will contain classrooms, laboratories, and administrative offices for mining, metallurgical, mineral, mechanical, civil, electrical and industrial engineering departments. The building is the first unit of the Center for which plans have been made public. It was designed by the firm of Voorhees, Walker, Smith, Smith and Haines, New York architects.

Columbia University's Bancroft Prizes, among the richest available to historians, were awarded in May to Daniel J. Boorstin for his *The Americans: The Colonial Experience*, and to Ernest Samuels for his *Henry Adams: The Middle Years*. The \$3,000 awards are given annually for distinguished studies in American history, diplomacy, and international relations.

If, at this late date, the "training conditions" of intellectuals are to be examined sensibly, findings from a recent survey of 30,000 Columbia graduate students—who they are, under what conditions they best achieved their ends, where they went—ought to be of the first importance. Prepared at Columbia by Dr. Hans Rosenhaupt, (since appointed national director of the Woodrow Wilson National Fellowship Foundation) the study of students enrolled in the graduate faculties from 1940 to 1956 disclosed, among other things, the following generalities: students who entered graduate schools after the age of 29 completed the work they came for more rapidly than did their younger colleagues; women were poor risks for earning the PhD; 32 per cent of all students in the graduate faculties in the fall of 1956 received some sort of financial assistance to augment private funds, with the greatest amount going to students in the Pure Sciences (this reflects a national situation in which natural science and engineering students, as one-third of the graduate population, received over two-thirds of the funds awarded to support graduate study); students who took the allowable maximum number of

courses from the beginning of graduate careers were more apt to earn a degree than were those who took fewer.

Explaining that the success of graduate students directly affects the supply of secondary and college teachers, Dr. Rosenhaupt said that from 17,000 to 24,000 new college teachers a year will be needed by 1960 and between 25,000 and 30,000 a year between 1960 and 1970; at best, no more than 10,000 doctorates in liberal arts subjects will be awarded each year in the foreseeable future. The most effective among the first steps to be taken to balance supply and demand in all subjects would be to raise college teachers' salaries to a rate that may attract students now drawn to intellectual professions like medicine, law, and business, says the report. It further indicates the continuing necessity of financial aid to students from federal and private agencies.

The 130-page study (*Graduate Students: Experience at Columbia University, 1940-1956*) was published this winter by Columbia University Press. It was supported by the Ford Foundation's Fund for the Advancement of Education.

"Apparently we require either a single very large volcanic explosion, or the simultaneous explosion of many volcanoes, or conceivably a cometary collision" to account for one of the most recent and important findings of scientists aboard the research vessel *Vema*. So said scientists from Columbia's Lamont Geological Observatory in March, in a first report on colleague J. Lamar Worzel's discovery of an uncharted layer of glass-like ash on and below the bottom of the tropical eastern Pacific. During the *Vema's* current voyage [FORUM; Winter 1959], Dr. Worzel has found indications that the ash, resembling volcanic deposits, extends 750 miles north and 825 miles south of the Equator in a layer measurable in inches, sometimes on the ocean floor, sometimes as deep as 120 feet below it. It was sampled with the *Vema's* coring mechanism, which extracts vertical lengths of sediment from the ocean bottom more or less intact. Deposited within

perhaps the last 100,000 years, the Worzel Ash (as it is called) suggests a volcanic source. In Dr. Worzel's words, "it may be necessary to attribute it to a worldwide volcanism or perhaps to the fiery end of bodies of cosmic origin," of which this ash would have been the debris.

• Making one- or two-night stands on the campus to deliver extracurricular addresses this winter and spring were Harry S. Truman, Arthur Schlesinger, Jr., Fidel Castro, Eleanor Roosevelt, Mary McCarthy, Norman Podhoretz, Norman Mailer, Harry Golden, and Austrian Vice Chancellor Bruno Pittermann.

• The New York School of Social Work, the oldest and largest such school in the world, becomes a member of the Columbia University Corporation on July 1, the 12th major division of the University's central organization. University officials said that the absorption of the School into the University's central budget and under its central administrative body foreshadows its eventual move to the Morningside Heights area, though they did not say when that would take place. Established in 1898, the School was affiliated with the University in 1940. It has occupied the Carnegie mansion at Fifth Avenue and 91st Street since 1949. Only Barnard College, Teachers College, and the College of Pharmacy remain affiliated with the University's central corporation but independent in their budget and trustees.

• Some 1,100 high school students were asked their views on several professions—what they paid, accomplished, and promised—when interviewers from the Journalism school polled a crowd of high school publications officials at a convention on campus this winter. The students, three-fourths of whom were girls, thought that medicine offered the highest prestige, was most "interesting," and most useful to society; law paid best but was sixth in usefulness. Public officials were rated as the poorest prospects for a happy family life and ministers as the best. The students considered teaching to afford the lowest prestige and income and thought banking and business

to be least useful and least interesting. Despite their own journalistic activities, the majority believed that while journalism was highly interesting, as a career it would be low in pay and prestige, difficult to advance in, and detrimental to family life.

• A collection of manuscripts, typescripts, proofs and published works by the late Don Marquis, humorist and poet, was presented to Columbia by Doubleday and Company this winter.

The Marquis collection joins 294 manuscript collections in the Columbia University Libraries. These include the manuscript of Hart Crane's *The Bridge*, a draft copy in John Jay's hand of the *Federalist* No. 5, a letterbook of John Milton, correspondence and papers of Frances Perkins and Henry Wallace, manuscripts of George Santayana, 124 letters by Leo Tolstoy, the manuscript of Herman Wouk's *The Caine Mutiny*, and a voluminous correspondence between Nicholas Murray Butler and nine US presidents.

• The University public relations office speculated recently that Bob Davis, pitcher for the Kansas City Athletics, may very soon be the nation's only major league baseball player with a Master's degree in History. Completing his third winter season in the Graduate Faculty, Mr. Davis is working on a Master's essay on the subject of Charles Edward Russell, New York newspaperman and politician. He has been with the Athletics since 1955. The 25-year-old Davis said that he knows of other big-league players with Master's degrees, but "most of them are in education."

• With a view to establishing a large astrographic telescope in the Southern Hemisphere, from which to study the portions of the Universe best seen from there, the National Science Foundation has awarded \$25,300 to the University for use in one year by Professor Jan Schilt, Columbia astronomer. Professor Schilt will investigate possible sites in South America.

• The New York Times Foundation has recently established scholarships

for undergraduate study at Columbia and Barnard for children of US foreign service officers. The scholarships—one each year at the University and Barnard—will provide for the full four-year undergraduate course. The New York Times Foundation will leave the selection of candidates to the college authorities, who will consult on selections with the education committee of the American Foreign Service Foundation.

• Two new lifetime trustees were appointed to the University's board in the past few months: William T. Gosset, '28 Law, vice president of the Ford Motor Company; and Samuel R. Walker, '29 College, president of the Sterling Forest Corporation and vice president of the City Investment Company. Mr. Gosset, who is also general counsel to the Ford Company, is a nationally prominent lawyer. His new colleague on Columbia's governing board is a specialist in community planning. The University has twenty-four trustees in all.

• "The businessman amortizes his capital equipment over a long period . . . Why should not the training of the human mind also be amortized . . . perhaps from the time the PhD is conferred until retirement from active production, [say,] at the normal retirement age of sixty-five?" The suggestion that men and women be allowed to pay the cost of their higher education over a period of years was made recently in *Columbia College Today* by Joe Jefferson, director of admissions at Columbia. Pointing out that within ten years the cost of education through the PhD may range between \$20,000 and \$30,000, and that the economy stands to gain from the work of the educated man as well as that of the much-mortgaged businessman, Mr. Jefferson urged more "realistic" support of higher education by the society at large. He found generally sensible the provision of the National Defense Education Act which allows students in participating colleges who enter elementary or public school teaching to be "forgiven" ten per cent of their debt for each year spent at such teaching, up to a five-year, fifty per cent forgiveness.

AN EXCHANGE OF LETTERS

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of "one billion in US aid" that military aid does *not* help the economy, that the stated purpose of American aid is not only to bring a better life to its recipients, but also to help them to bear a greater part of the free world's burden of military preparedness. . . .

In passing I would like to point out also the great cold wave of the winter of 1955-1956, unprecedented in severity, that not only froze the citrus crop (one of Spain's important exports) but killed outright a great many citrus and olive trees (causing a shortage of edible oils and a severe drop in olive oil exports) . . . And also Valencia's disastrous 1957 flood. All this shows dramatically the variability of the Spanish weather—small wonder then that the Spanish Government has pushed a policy of industrialization, to furnish insulation against the vagaries of the climate, while at the same time pressing irrigation (the Badajoz, Jaen and Monegros plans among many others) and reforestation (200,000 acres yearly, on average). As for the state of the Spanish industrial plant (four times pre-war output) you can ask any truly competent expert . . . about its progress in the last twenty years. Now I admit that Spain is no Garden of Eden, and that she has not found the Millennium yet; but, with all her limitations, she is steadily progressing.

What Mr. Beichman really has in mind appears at the end of his article, when he calls outright for the American Government to change its policy towards Franco, and, saying that US dollars are the *Caudillo's* only prop, suggests that they can be used to push Spain towards somewhere or something which he very cautiously does not describe. What the author is calling for, in the use of economic aid as a lever to force changes in the recipient's organization and social order, is simply what is called "dollar imperialism" by Reds and by many US critics, and which responsible US officials hotly deny using.

One last question I would like to ask Mr. Beichman. Why, in his final call, does he single out Spain from all other dictatorships as a target for active intervention? This, when he recognizes, at the start of his article, that there is much greater freedom in Spain than in other "police states" (although I object to that description of Spain, when I consider that *total* jail population in Spain today is *one half* that of 1935, with 5 million more added to the population; any way you look at this figure, it is hard to reconcile it with the picture of Spain conjured up by Mr. Beichman). I believe that the reason can better be found in his resume:

Of a Spain in which a "Spanish liberal," according to him, said that he could be quoted on his political opinions but "for heaven's sake" not to say that his children weren't baptized. Why not? Surely not because of Franco; inefficient as he can be, baptism is a fact very easily ascertained. A Spain in which family life is very close—apparently to Mr. Beichman this is an aberration. A Spain in which the young intellectuals, who have travelled, studied and worked in Europe (passing in and out of a poor, backward and inefficient police state!) have met a 'different kind of young woman' (as he puts it, this is a

gratuitous insult to Spanish women) and were uttering an incantation asking for change. A Spain in which, according to Mr. Beichman, a Protestant is more feared and hated than a Communist (could it possibly be the other way around? At least Mr. Beichman's connections might make it seem so). In sum, a Spain which must be changed in spite of itself, because it is not what he would like it to be.

Imagine a "Letter from the United States" by an anti-American, which only spoke of the problems of those unemployed, of race friction, of nepotism or any political scandal which happened to break in the newspapers at the moment, of Congressional committees harping on "the lack of military preparedness as disclosed by Committee A," or "the tie-up between gangsters and organized labor as disclosed by Committee B," "some details of the vice situation as shown in the records of Committee C," "the juvenile delinquency problem in the words of the noted Mr. X," etc. . . . Such a picture would *not* represent the US or even come close to being a sober analysis of it.

In closing, let me add that, by virtue of the ferociously independent thinking that characterizes Spaniards and which convinces them that their own pet solutions to any and all problems, including those they know nothing about, are far and away the best, I also have my own ideas on how to run things and my own criticisms on how they are run by anybody else; but, most emphatically, my picture of Spain is radically different from that painted by Mr. Beichman, although I am the first to admit that, as happens with every human effort, things could be done even better than they are.

ANTONIO ARBOIX
Barcelona, Spain

Mr. Beichman replies:

● Let me take Senor Arboix's points *seriatim*:

1. I did meet supporters of the Franco regime; specifically, Jose Maria Martinez Sanchez Arjona, secretary-general of the *Organizacion Sindical*, and Manuel Valle, the organization's deputy chief in charge of foreign relations, and their various assistants. I interviewed both men and my lengthy reports were published in the *Christian Science Monitor*, Feb. 7, 1959. I met other officials, too, whose candor was such I hesitate to give their names.

2. Regarding the number of foreign-made automobiles on the streets of Madrid, I can only say that my statement is based on information from people in a position to know and that is all I can say about that. All that Senor Arboix says on the subject may be true, but it is incomplete, particularly in a country where a \$300 million currency export scandal is still a fresh memory.

3. Despite the irrigation statistics, it is a tragic fact that while the Spanish population has grown 20 per cent in 20 years, according to Emmet Hughes in the *May Esquire*, "the value of agricultural production has remained exactly the same." He adds that "for uncounted scores of thousands, especially in the countryside and villages, this simple statistic means hunger, tuberculosis, and home in a slime-filled cave."

4. Point 3 above relates directly to Senor Arboix's statement ". . . small wonder then that the Spanish gov-

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ernment has pushed a policy of industrialization . . ." Objective informants, who neither admire nor hate Franco, told me that the regime's industrialization program, with its inevitable shift of investment from essential agricultural expansion to the building, for example, of steel mills, was questionable economics.

5. Senor Arboix is hypersensitive to assume that my phrase "different kind of young woman" is insulting. The ladies of Spain are adorable, handsome, but they are different from the ladies of Paris, of London, of Brussels, and of New York.

6. I did not suggest that the close family of Spain was an aberration, but I did quote in my article the words of Ortega y Gasset that "the more advanced a country is, the less important the family."

7. Regarding the question as to who is more hated in Spain, a Communist or a Protestant, the Spanish government's persecution of non-Catholic Christians is quite well-known, but what Senor Arboix seems not to be aware of is the growth of Communist influence in Spain. His reference to "Mr. Beichman's connections" with its sly insinuation is as silly as if, without knowing anything about Senor Arboix, I would hint mysteriously about *his* connections.

8. On one point, I have a sense of discomforting agreement with Senor Arboix. Although I did not single out Spain as "a target for active intervention," he has every reason to ask why Spain is singled out "from all other dictatorships." I must concede that liberal thought in the western world takes a far harsher line towards Falangist Spain than, say, towards Yugoslavia and the Soviet Union. Although cultural exchanges with Communist dictatorships is the *dernier cri* in western intellectual circles, I doubt whether a liberal quorum could be obtained to organize a vast cultural exchange program with Spain.

9. It is unfortunate that Senor Arboix is so intense in his role as buckler for Franco that he has forgotten that I wrote that there is indeed a qualitative difference between Fascist Spain and Communist countries as to the degree of repression.

I want to say to Senor Arboix that it is my love for Spain and its people which so saddens me when I think of their dismal condition. My anger at Franco is that after twenty years of his dictatorship Spain is a medieval cloister and its people are denied the joys of freedom and hope. We owe much to Spain, its culture and heritage. The Spain we admire is the Spain of Unamuno, Ortega y Gasset, Pablo Casals, and it must be the dream of its admirers that it shall someday have its liberation and renaissance without battle or bloodshed. I think in his heart that is what Senor Arboix wants for his Spain because the bitterness and exaggeration of his letter conceals what cannot be concealed—that his standard of achievement and, indeed, aspiration is that of the democracies not the dictatorships. Senor Arboix must know the sonnet of Quevedo y Villegas, written almost 400 years ago, which begins:

I saw the ramparts of my native land,
One time so strong, now dropping in decay,
Their strength destroyed by this new age's way
That has worn out and rotted what was grand . . .

and which closes:

And there was nothing on which to set my eyes
That was not a reminder of the end.

I think Senor Arboix's letter, with its implicitness, is a reminder that there may yet be a beginning for a great and noble Spain.

ARNOLD BEICHMAN
New York City

